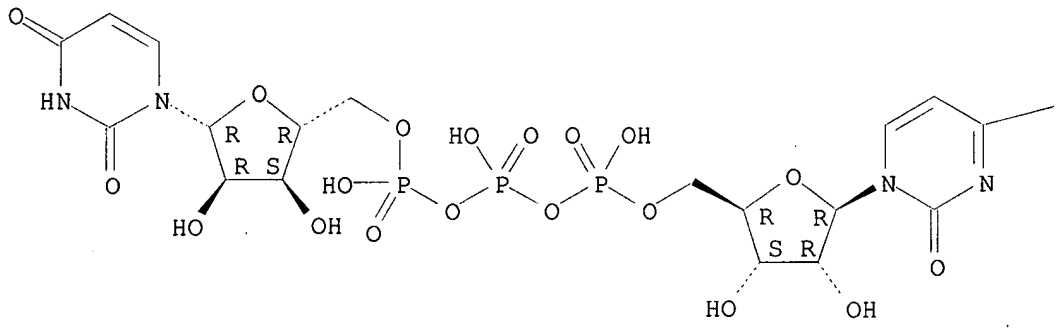
```
=> fil reg
FILE 'REGISTRY' ENTERED AT 13:09:25 ON 16 JUL 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2002 American Chemical Society (ACS)

STRUCTURE FILE UPDATES:   15 JUL 2002  HIGHEST RN 438572-95-3
DICTIONARY FILE UPDATES:  15 JUL 2002  HIGHEST RN 438572-95-3

TSCA INFORMATION NOW CURRENT THROUGH January 7, 2002

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Calculated physical property data is now available.  See HELP PROPERTIES
for more information.  See STNote 27, Searching Properties in the CAS
Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> d ide can tot l139

L139 ANSWER 1 OF 12  REGISTRY  COPYRIGHT 2002 ACS
RN   345950-34-7  REGISTRY
CN   Uridine 5'-(tetrahydrogen triphosphate), P''.fwdarw.5'-ester with cytidine
     (9CI)  (CA INDEX NAME)
FS   STEREOSEARCH
MF   C18 H26 N5 O19 P3
SR   CA
LC   STN Files:   CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.
```

PAGE 1-A



$C_{18}P_3U$

PAGE 1-B

—NH_2

Jan Delaval
Reference Librarian
Biotechnology & Chemical Library
CM1 1E07 – 703-308-4498
jan.delaval@uspto.gov

```
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

             3 REFERENCES IN FILE CA (1967 TO DATE)
             3 REFERENCES IN FILE CAPLUS (1967 TO DATE)
```

REFERENCE 1: 136:350567

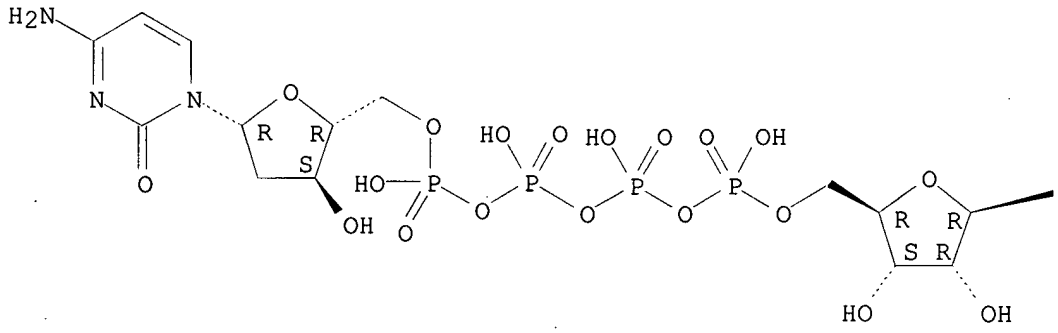
REFERENCE 2: 136:690

REFERENCE 3: 135:71289

L139 ANSWER 2 OF 12 REGISTRY COPYRIGHT 2002 ACS
RN **318250-11-2** REGISTRY
CN Uridine 5'-(pentahydrogen tetraphosphate), P'''.fwdarw.5'-ester with 2'-deoxycytidine, tetrasodium salt (9CI) (CA INDEX NAME)
OTHER NAMES:
CN INS 37217
FS STEREOSEARCH
MF **C18 H27 N5 O21 P4 . 4 Na**
SR CA
LC STN Files: CA, CAPLUS, DRUGNL, DRUGUPDATES, USPATFULL
CRN (211448-85-0)

Absolute stereochemistry.

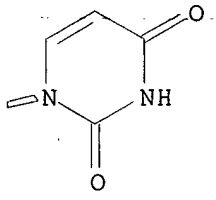
PAGE 1-A



●4 Na

dCP4U (salt)

PAGE 1-B



4 REFERENCES IN FILE CA (1967 TO DATE)
4 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:350561

REFERENCE 2: 136:200422

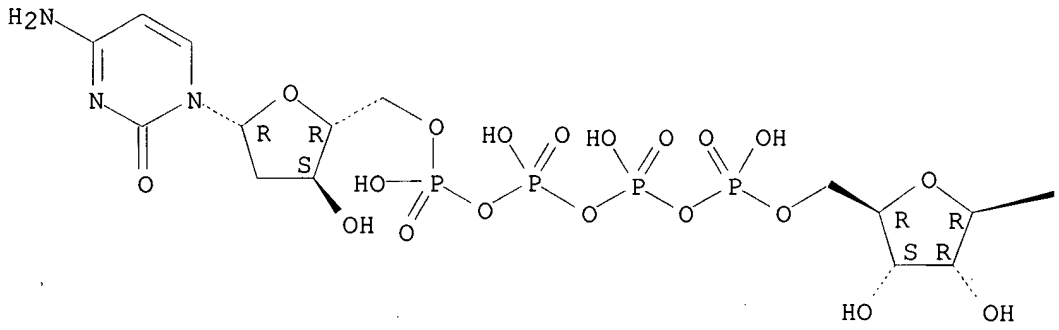
REFERENCE 3: 135:298823

REFERENCE 4: 134:91109

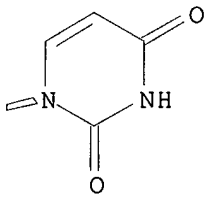
L139 ANSWER 3 OF 12 REGISTRY COPYRIGHT 2002 ACS
RN **211448-85-0** REGISTRY
CN Uridine 5'-(pentahydrogen tetraphosphate), P'''.fwdarw.5'-ester with 2'-deoxycytidine (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF **C18 H27 N5 O21 P4**
CI COM
SR CA
LC STN Files: CA, CAPLUS, DRUGUPDATES, TOXCENTER, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



dCP4U

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

9 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
9 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:350567

REFERENCE 2: 136:151393

REFERENCE 3: 136:690

REFERENCE 4: 135:298823

REFERENCE 5: 135:71289

REFERENCE 6: 134:91109

REFERENCE 7: 133:12775

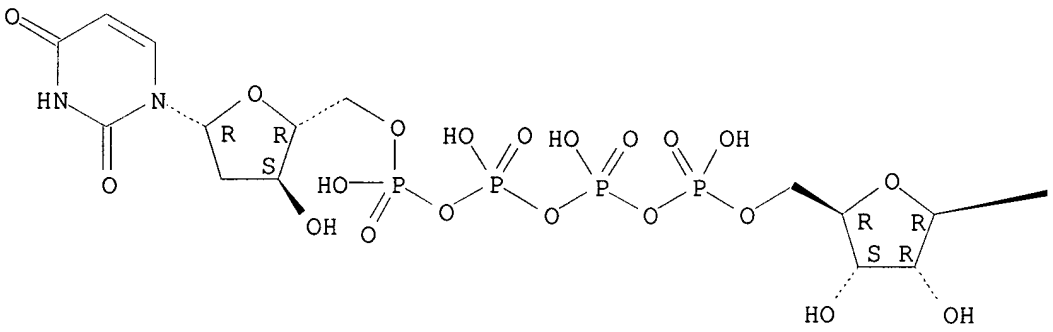
REFERENCE 8: 132:453

REFERENCE 9: 129:175919

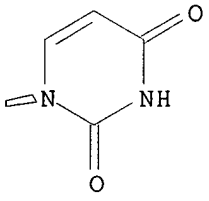
L139 ANSWER 4 OF 12 REGISTRY COPYRIGHT 2002 ACS
RN **211448-78-1** REGISTRY
CN Uridine 5'-(pentahydrogen tetraphosphate), 2'-deoxy-, P'''.fwdarw.5'-ester with uridine (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF **C18 H26 N4 O22 P4**
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



dU2P4

or

dUP4U

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

6 REFERENCES IN FILE CA (1967 TO DATE)
6 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:350567

REFERENCE 2: 136:151393

REFERENCE 3: 136:690

REFERENCE 4: 135:298823

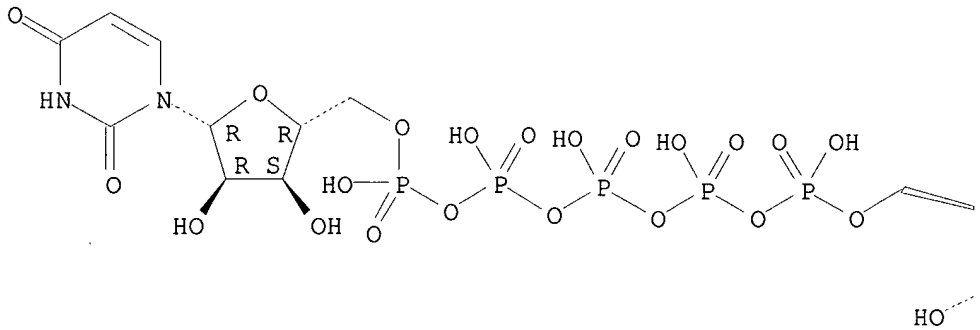
REFERENCE 5: 135:71289

REFERENCE 6: 129:175919

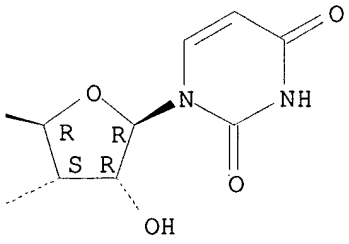
L139 ANSWER 5 OF 12 REGISTRY COPYRIGHT 2002 ACS
RN **211448-70-3** REGISTRY
CN Uridine 5'-(hexahydrogen pentaphosphate), P''''.fwdarw.5'-ester with uridine (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF **C18 H27 N4 O26 P5**
CI COM
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



U_2P_5

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

6 REFERENCES IN FILE CA (1967 TO DATE)
6 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:350567

REFERENCE 2: 136:151393

REFERENCE 3: 136:690

REFERENCE 4: 135:298823

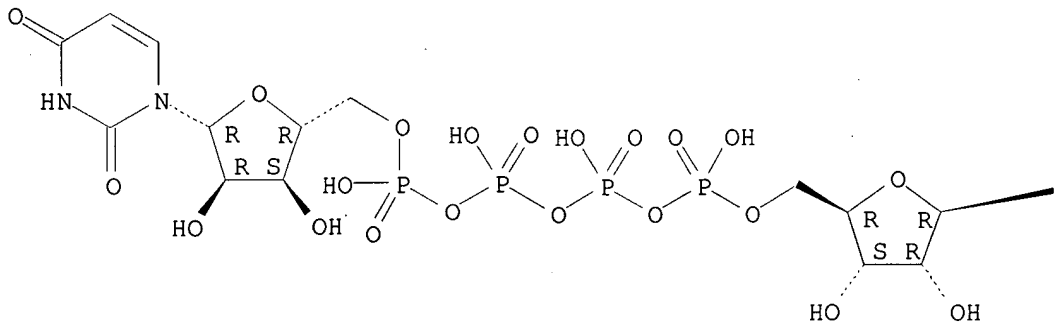
REFERENCE 5: 135:71289

REFERENCE 6: 129:175919

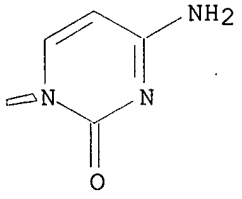
L139 ANSWER 6 OF 12 REGISTRY COPYRIGHT 2002 ACS
RN **111648-11-4** REGISTRY
CN Uridine 5'-(pentahydrogen tetraphosphate), P'''.fwdarw.5'-ester with cytidine (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF **C18 H27 N5 O22 P4**
CI COM
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



CP4U

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

9 REFERENCES IN FILE CA (1967 TO DATE)
9 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:350567

REFERENCE 2: 136:350561

REFERENCE 3: 136:200422

REFERENCE 4: 136:151393

REFERENCE 5: 136:690

REFERENCE 6: 135:298823

REFERENCE 7: 135:71289

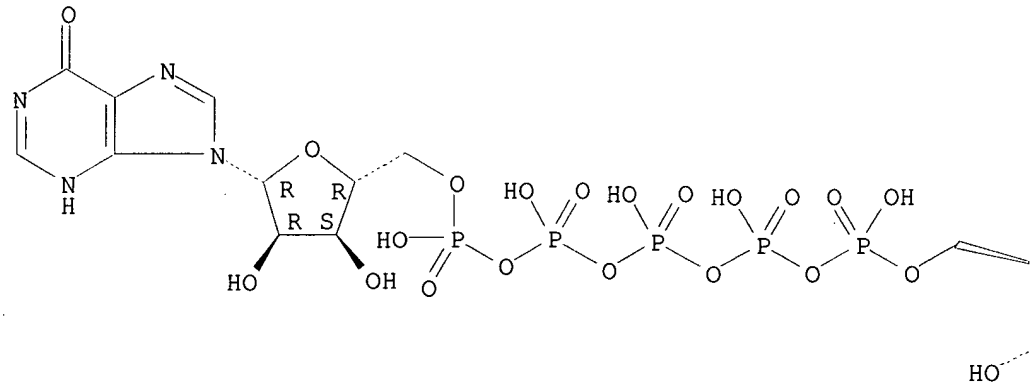
REFERENCE 8: 129:175919

REFERENCE 9: 107:232748

L139 ANSWER 7 OF 12 REGISTRY COPYRIGHT 2002 ACS
RN **81534-69-2** REGISTRY
CN Inosine 5'-(hexahydrogen pentaphosphate), P''''.fwdarw.5'-ester with inosine (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF **C20 H27 N8 O24 P5**
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

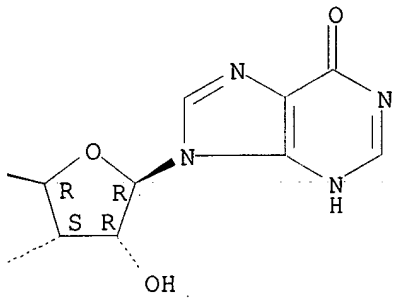
Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

IP5 I



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

6 REFERENCES IN FILE CA (1967 TO DATE)
6 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:350567

REFERENCE 2: 136:690

REFERENCE 3: 135:71289

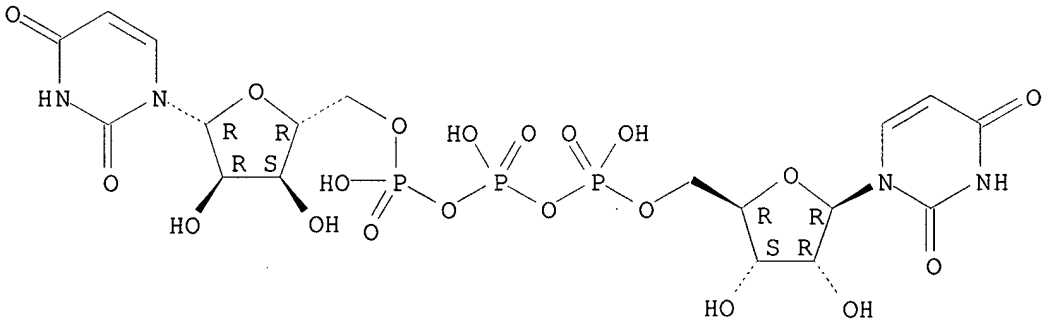
REFERENCE 4: 133:276635

REFERENCE 5: 132:44923

REFERENCE 6: 96:177213

L139 ANSWER 8 OF 12 REGISTRY COPYRIGHT 2002 ACS
RN **63785-59-1** REGISTRY
CN Uridine 5'-(tetrahydrogen triphosphate), P''.fwdarw.5'-ester with uridine (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF **C18 H25 N4 O20 P3**
CI COM
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

U_2P_3

8 REFERENCES IN FILE CA (1967 TO DATE)
8 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:350567

REFERENCE 2: 136:151393

REFERENCE 3: 136:690

REFERENCE 4: 135:71289

REFERENCE 5: 132:265443

REFERENCE 6: 130:125350

REFERENCE 7: 129:175919

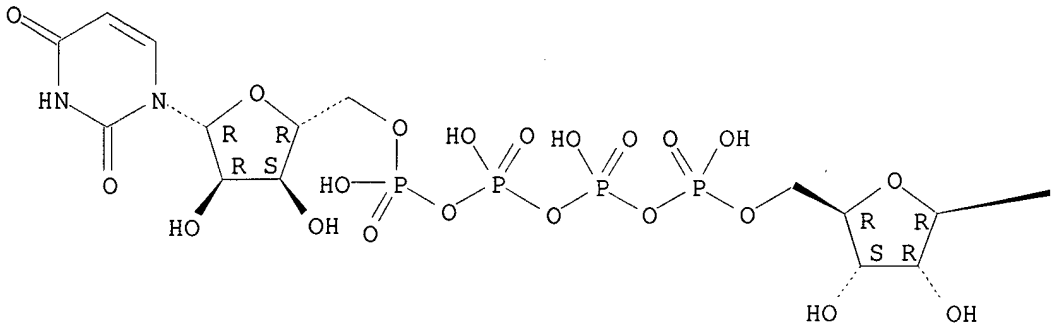
REFERENCE 8: 88:70843

L139 ANSWER 9 OF 12 REGISTRY COPYRIGHT 2002 ACS
RN **59985-21-6** REGISTRY
CN Uridine 5'-(pentahydrogen tetraphosphate), P'''.fwdarw.5'-ester with uridine (9CI) (CA INDEX NAME)
OTHER NAMES:
CN P1,P4-Diuridine 5'-tetraphosphate

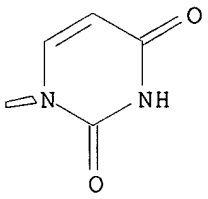
FS STEREOSEARCH
MF **C18 H26 N4 O23 P4**
CI COM
LC STN Files: CA, CAPLUS, CASREACT, DRUGNL, DRUGPAT, DRUGUPDATES, TOXCENTER, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



U_2C_4

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

20 REFERENCES IN FILE CA (1967 TO DATE)
21 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:350567

REFERENCE 2: 136:151393

REFERENCE 3: 136:690

REFERENCE 4: 135:358114

REFERENCE 5: 135:298823

REFERENCE 6: 135:71289

REFERENCE 7: 134:361372

REFERENCE 8: 133:12775

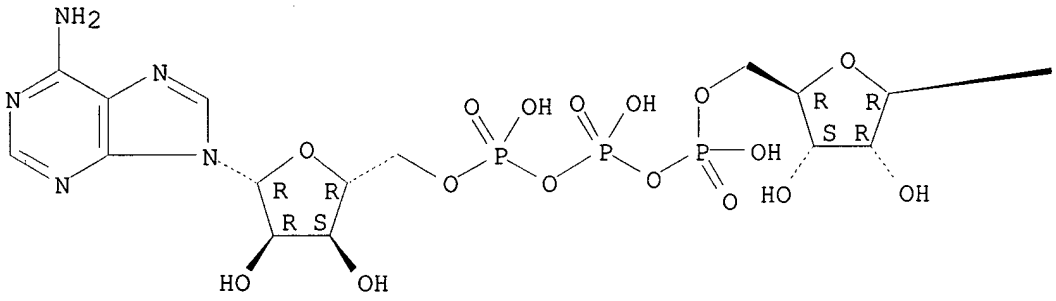
REFERENCE 9: 132:265443

REFERENCE 10: 131:153747

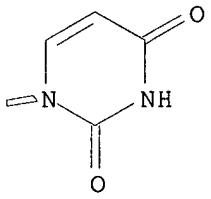
L139 ANSWER 10 OF 12 REGISTRY COPYRIGHT 2002 ACS
RN **30632-06-5** REGISTRY
CN Adenosine 5'-(tetrahydrogen triphosphate), P''.fwdarw.5'-ester with uridine (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Adenosine 5'-(tetrahydrogen triphosphate), 5'.fwdarw.5'-ester with uridine (8CI)
OTHER NAMES:
CN P1,P3-(Adenosine-5'-uridine-5') triphosphate
FS STEREOSEARCH
DR 83008-72-4
MF **C19 H26 N7 O18 P3**
LC STN Files: CA, CAPLUS, MEDLINE, TOXCENTER, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



UP_3A.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

8 REFERENCES IN FILE CA (1967 TO DATE)
8 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:350567

REFERENCE 2: 136:690

REFERENCE 3: 135:71289

REFERENCE 4: 107:93017

REFERENCE 5: 106:116316

REFERENCE 6: 104:225161

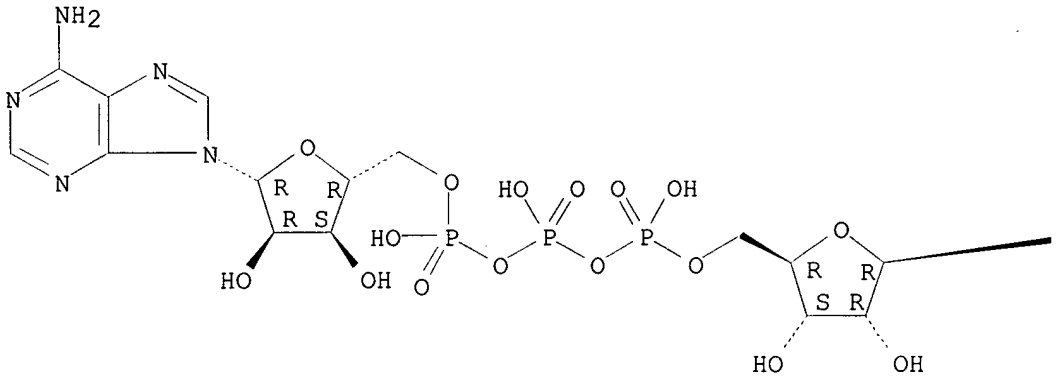
REFERENCE 7: 97:158617

REFERENCE 8: 74:19380

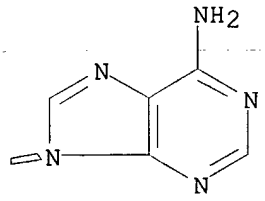
L139 ANSWER 11 OF 12 REGISTRY COPYRIGHT 2002 ACS
RN **5959-90-0** REGISTRY
CN Adenosine 5'-(tetrahydrogen triphosphate), P''.fwdarw.5'-ester with adenosine (8CI, 9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Adenosine 5'-triphosphate, 5'-ester with adenosine (7CI)
OTHER NAMES:
CN Adenosine-(5')-triphospho-(5')-adenosine
CN Ap3A
CN ApppA
CN P1,P3-Diadenosine-5' triphosphate
FS STEREOSEARCH
DR 158700-26-6
MF **C20 H27 N10 O16 P3**
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



A2P3

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

217 REFERENCES IN FILE CA (1967 TO DATE)
4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
217 REFERENCES IN FILE CAPLUS (1967 TO DATE)
4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:16915

REFERENCE 2: 136:365598

REFERENCE 3: 136:350567

REFERENCE 4: 136:319650

REFERENCE 5: 136:275130

REFERENCE 6: 136:274624

REFERENCE 7: 136:257619

REFERENCE 8: 136:151393

REFERENCE 9: 136:144657

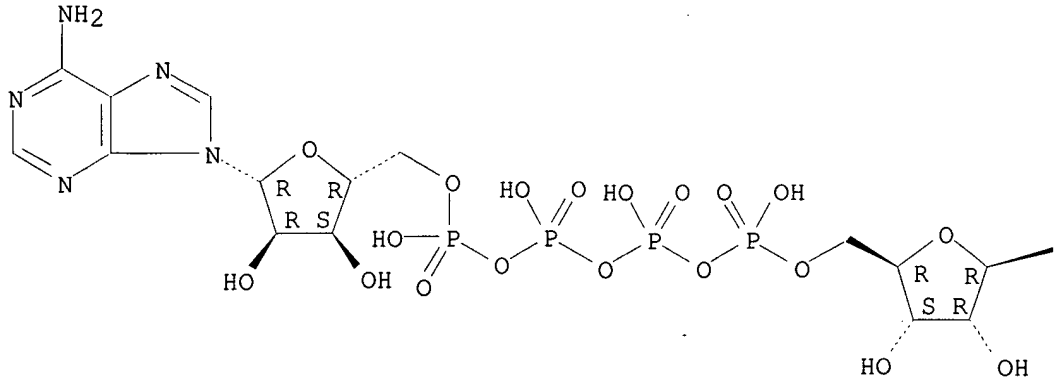
REFERENCE 10: 136:113039

L139 ANSWER 12 OF 12 REGISTRY COPYRIGHT 2002 ACS
RN **5542-28-9** REGISTRY
CN Adenosine 5'-(pentahydrogen tetraphosphate), P'''.fwdarw.5'-ester with adenosine (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 5'-Adenylic acid, 5'.fwdarw.5'-anhydride with adenosine 5'-triphosphate (8CI)
CN Adenosine 5'-(pentahydrogen tetraphosphate), 5'.fwdarw.5'-ester with adenosine (8CI)
CN Adenosine 5'-tetraphosphate, 5'-ester with adenosine (7CI)
OTHER NAMES:
CN 5',5'''-Diadenosine tetraphosphate
CN Adenosine-5'-tetraphospho-5'-adenosine
CN Ap4A
CN AppppA
CN Diadenosine 5',5'''-P1,P4-tetraphosphate
CN Diadenosine tetraphosphate
CN P1,P4-Di(adenosin-5'-yl)tetraphosphate
CN P1,P4-Diadenosine-5'-tetraphosphate
FS STEREOSEARCH
DR 166104-03-6, 128113-54-2, 138172-62-0, 88109-91-5, 117137-55-0, 199995-60-3
MF **C20 H28 N10 O19 P4**
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CIN, EMBASE, MEDLINE, RTECS*, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)

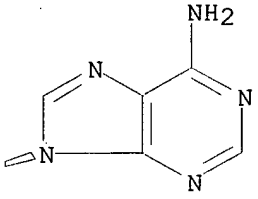
Absolute stereochemistry.

Ap4A

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

561 REFERENCES IN FILE CA (1967 TO DATE)
18 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
561 REFERENCES IN FILE CAPLUS (1967 TO DATE)
3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:17106

REFERENCE 2: 137:16915

REFERENCE 3: 136:396247

REFERENCE 4: 136:350567

REFERENCE 5: 136:336848

REFERENCE 6: 136:334993

REFERENCE 7: 136:319650

REFERENCE 8: 136:291146

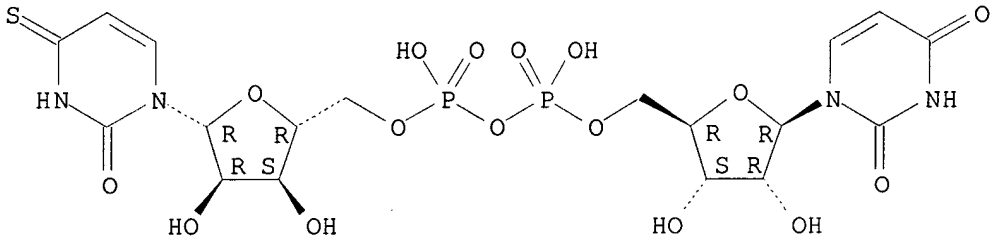
REFERENCE 9: 136:275130

REFERENCE 10: 136:257619

=> d ide can tot l141

L141 ANSWER 1 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **366004-23-1** REGISTRY
CN Uridine 5'-(trihydrogen diphosphate), 4-thio-, P'.fwdarw.5'-ester with uridine (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C18 H24 N4 O16 P2 S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



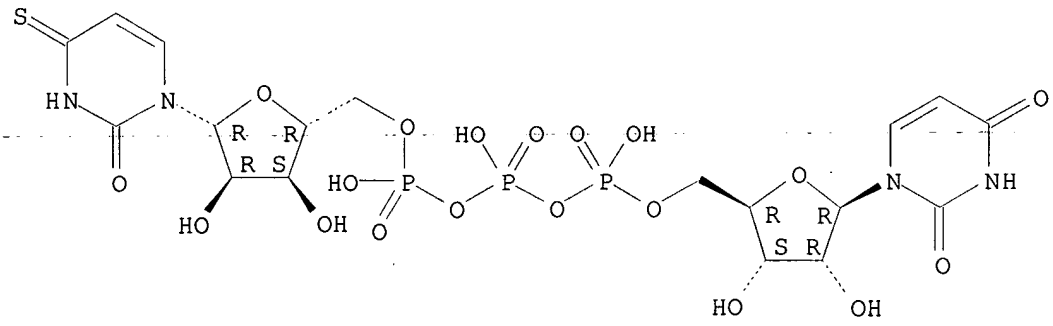
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 135:298823

L141 ANSWER 2 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **366004-22-0** REGISTRY
CN Uridine 5'-(tetrahydrogen triphosphate), 4-thio-, P''.fwdarw.5'-ester with uridine (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C18 H25 N4 O19 P3 S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

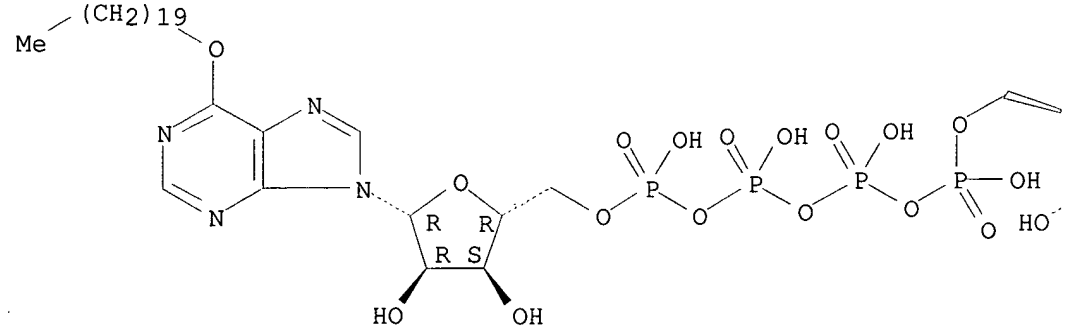
1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 135:298823

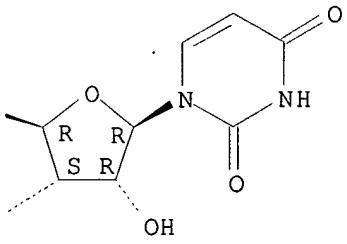
L141 ANSWER 3 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **366004-21-9** REGISTRY
CN Inosine 5'-(pentahydrogen tetraphosphate), 6-O-eicosyl-, P'''.fwdarw.5'-ester with uridine (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C39 H66 N6 O22 P4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

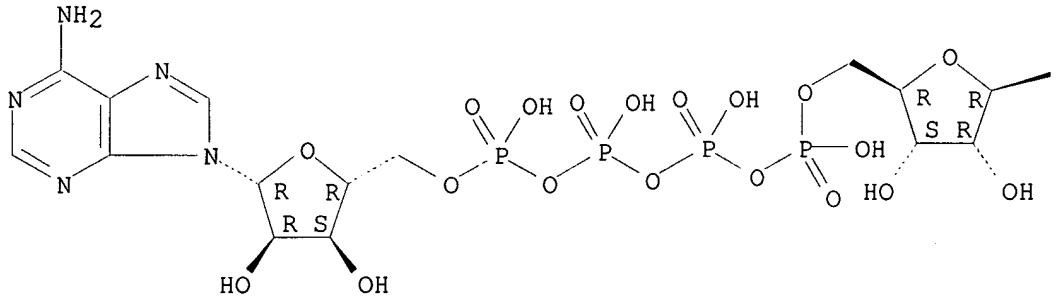
1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 135:298823

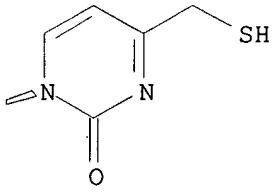
L141 ANSWER 4 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **366004-20-8** REGISTRY
CN Adenosine 5'-(pentahydrogen tetraphosphate), P'''.fwdarw.5'-ester with 4-(mercaptomethyl)-1-.beta.-D-ribofuranosyl-2(1H)-pyrimidinone (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C20 H29 N7 O20 P4 S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

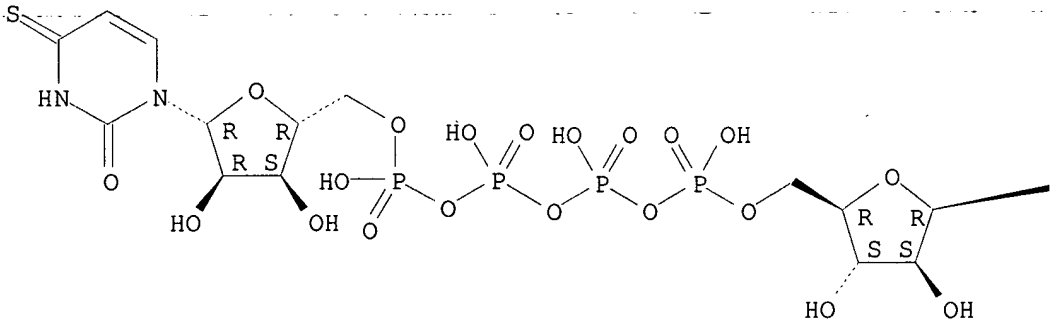
1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 135:298823

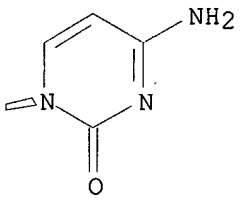
L141 ANSWER 5 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **366004-19-5** REGISTRY
CN Uridine 5'-(pentahydrogen tetraphosphate), 4-thio-, P'''.fwdarw.5'-ester with 4-amino-1-.beta.-D-arabinofuranosyl-2(1H)-pyrimidinone (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C18 H27 N5 O21 P4 S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

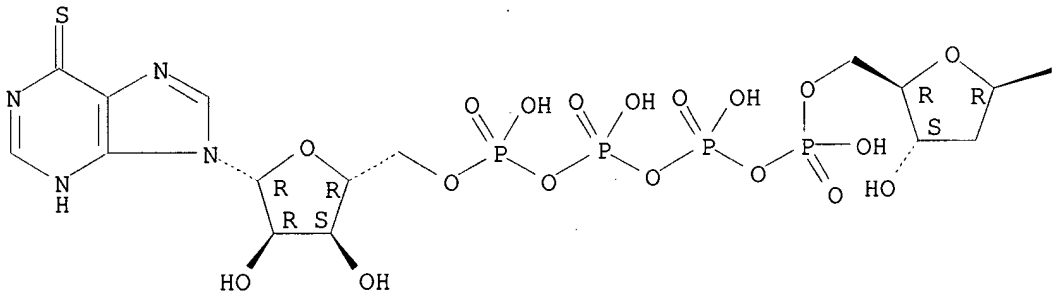
1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 135:298823

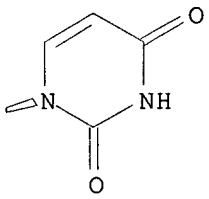
L141 ANSWER 6 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **366004-18-4** REGISTRY
CN Inosine 5'-(pentahydrogen tetraphosphate), 6-thio-, P'''.fwdarw.5'-ester with 2'-deoxyuridine (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C19 H26 N6 O20 P4 S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1967 TO DATE)

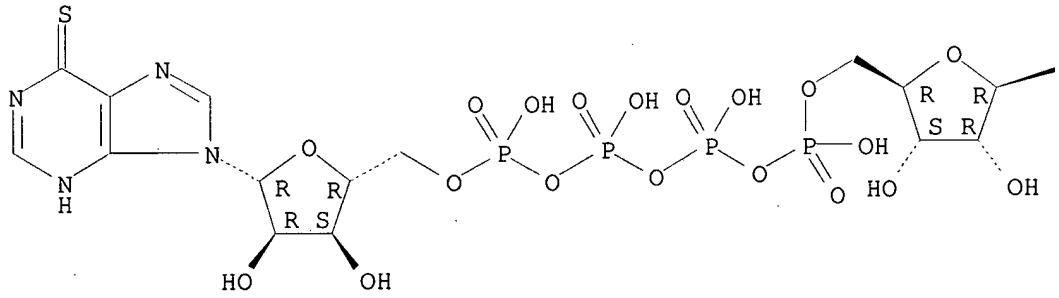
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 135:298823

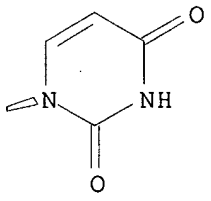
L141 ANSWER 7 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **366004-17-3** REGISTRY
CN Inosine 5'-(pentahydrogen tetraphosphate), 6-thio-, P'''.fwdarw.5'-ester with uridine (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C19 H26 N6 O21 P4 S
CI COM
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

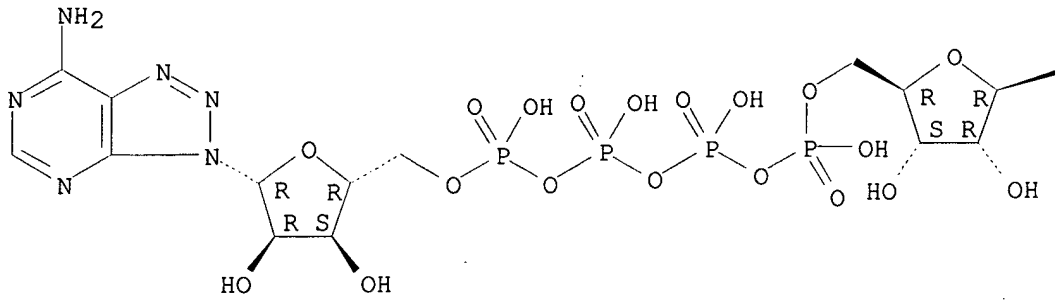
1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 135:298823

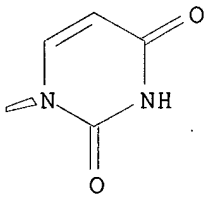
L141 ANSWER 8 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **366004-16-2** REGISTRY
CN Uridine 5'-(pentahydrogen tetraphosphate), P'''.fwdarw.5'-ester with 3-.beta.-D-ribofuranosyl-3H-1,2,3-triazolo[4,5-d]pyrimidin-7-amine (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C18 H26 N8 O21 P4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

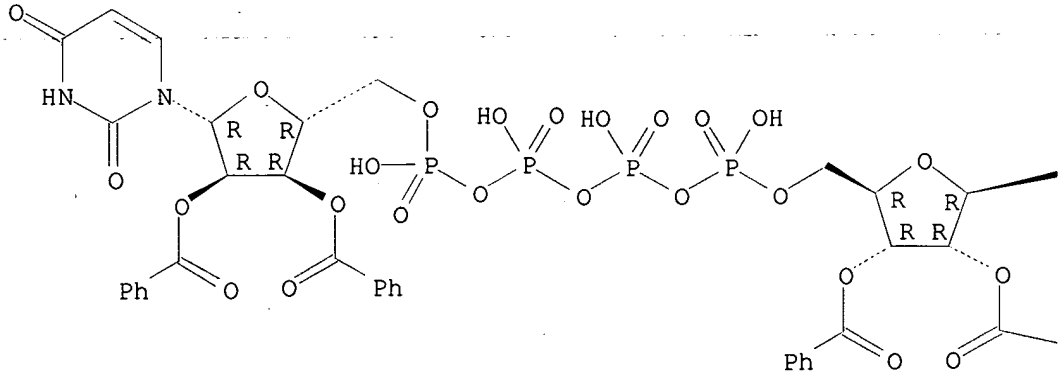
1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 135:298823

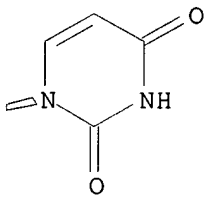
L141 ANSWER 9 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **366004-15-1** REGISTRY
CN Uridine 5'-(pentahydrogen tetraphosphate), P'''.fwdarw.5'-ester with uridine 2',3'-dibenzoate, 2',3'-dibenzoate (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C46 H42 N4 O27 P4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



Ph

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

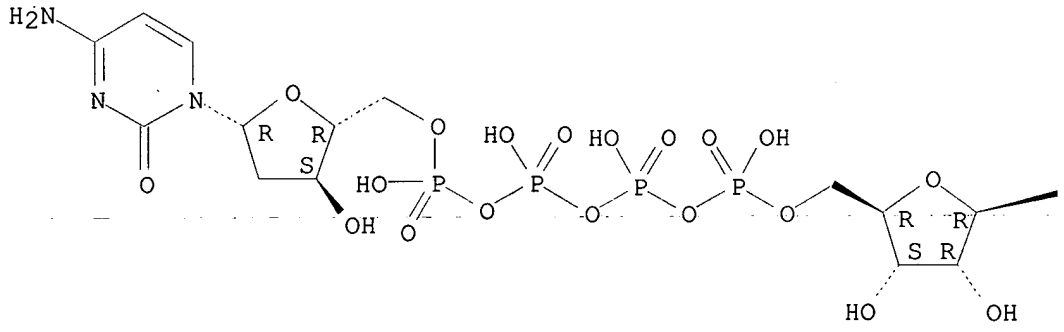
1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 135:298823

L141 ANSWER 10 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **251317-44-9** REGISTRY
CN Uridine 5'-(pentahydrogen tetraphosphate), P'''.fwdarw.5'-ester with 2'-deoxycytidine, tetraammonium salt (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C18 H27 N5 O21 P4 . 4 H3 N
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
CRN (211448-85-0)

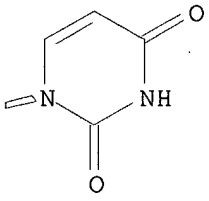
Absolute stereochemistry.

PAGE 1-A



4 NH_3

PAGE 1-B



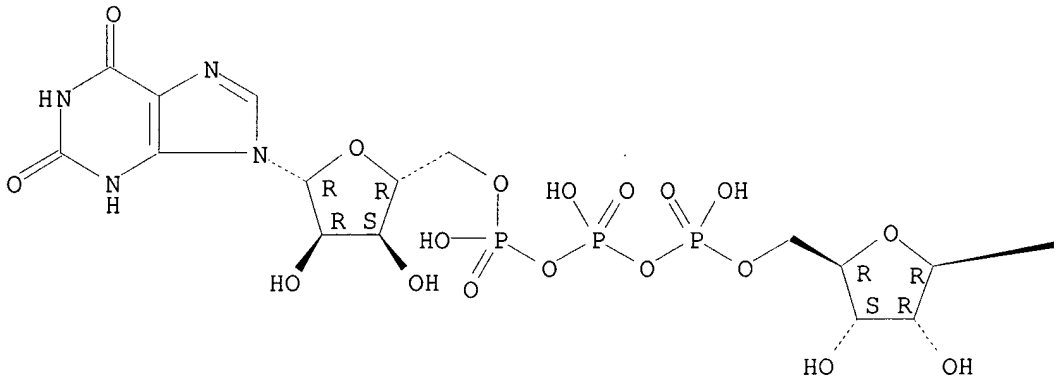
1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 132:453

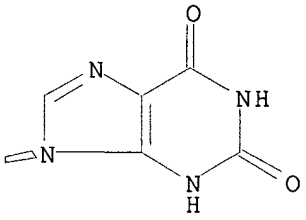
L141 ANSWER 11 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **211448-88-3** REGISTRY
CN Xanthosine 5'-(tetrahydrogen triphosphate), P''.fwdarw.5'-ester with xanthosine (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C20 H25 N8 O20 P3
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

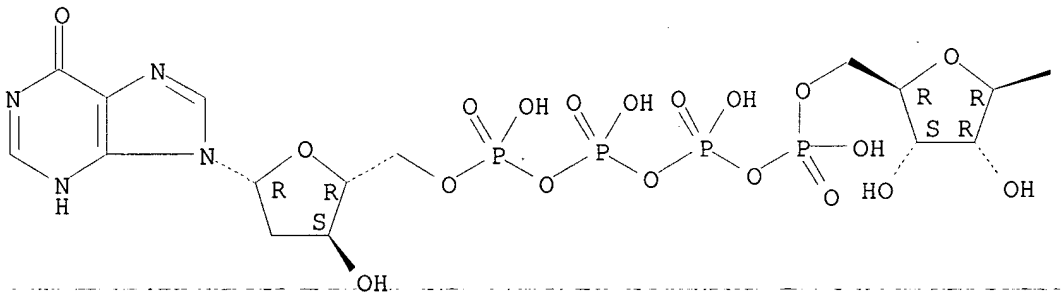
REFERENCE 1: 136:151393

REFERENCE 2: 129:175919

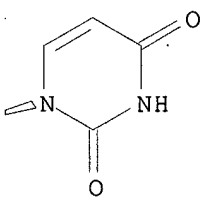
L141 ANSWER 12 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **211448-84-9** REGISTRY
CN Inosine 5'-(pentahydrogen tetraphosphate), 2'-deoxy-, P'''.fwdarw.5'-ester with uridine (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C19 H26 N6 O21 P4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

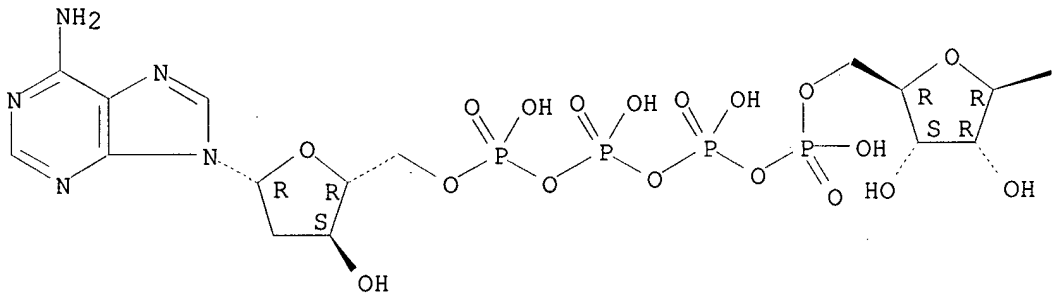
REFERENCE 2: 135:298823

REFERENCE 3: 129:175919

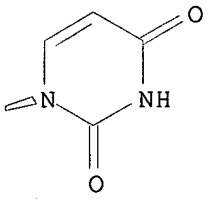
L141 ANSWER 13 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **211448-83-8** REGISTRY
CN Adenosine 5'-(pentahydrogen tetraphosphate), 2'-deoxy-, P'''.fwdarw.5'-ester with uridine (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C19 H27 N7 O20 P4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

REFERENCE 2: 135:298823

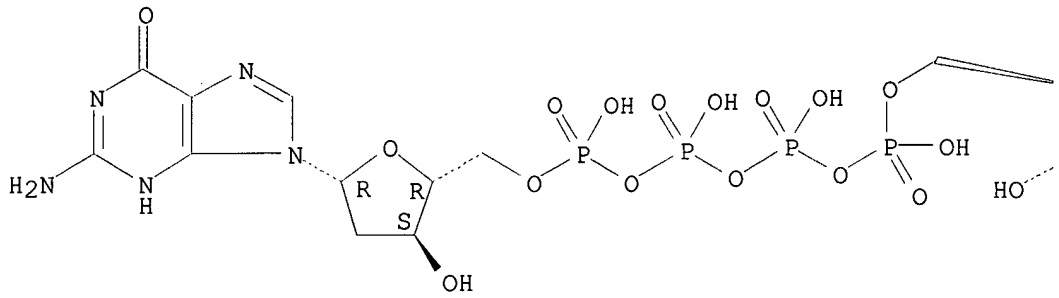
REFERENCE 3: 129:175919

L141 ANSWER 14 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **211448-82-7** REGISTRY
CN Guanosine 5'-(pentahydrogen tetraphosphate), 2'-deoxy-,

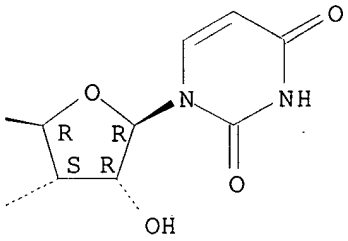
P'''.fwdarw.5'-ester with uridine (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C19 H27 N7 O21 P4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

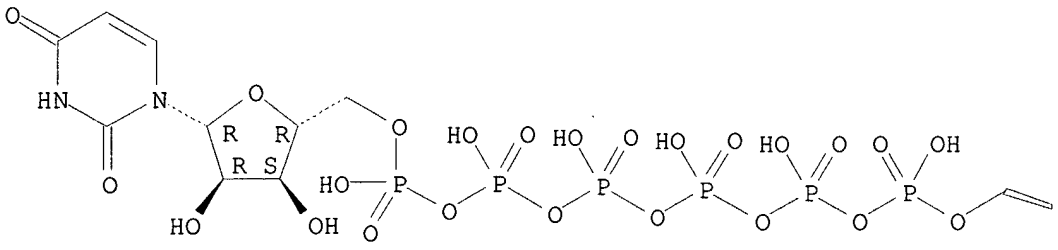
REFERENCE 2: 135:298823

REFERENCE 3: 129:175919

L141 ANSWER 15 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **211448-81-6** REGISTRY
CN Uridine 5'-(heptahydrogen hexaphosphate), P'''''.fwdarw.5'-ester with uridine (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C18 H28 N4 O29 P6
CI COM
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

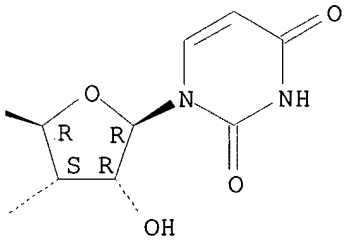
Absolute stereochemistry.

PAGE 1-A



HO

PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

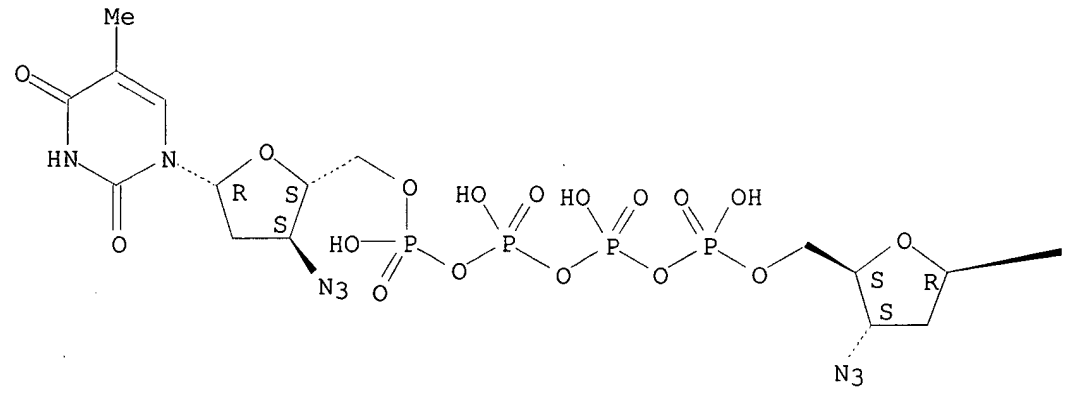
REFERENCE 2: 135:298823

REFERENCE 3: 129:175919

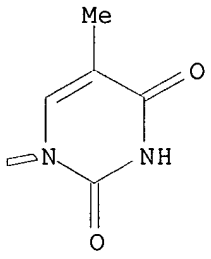
L141 ANSWER 16 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **211448-80-5** REGISTRY
CN Thymidine 5'-(pentahydrogen tetraphosphate), 3'-azido-3'-deoxy-, P''-.fwdarw.5'-ester with 3'-azido-3'-deoxythymidine (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C20 H28 N10 O19 P4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



3 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

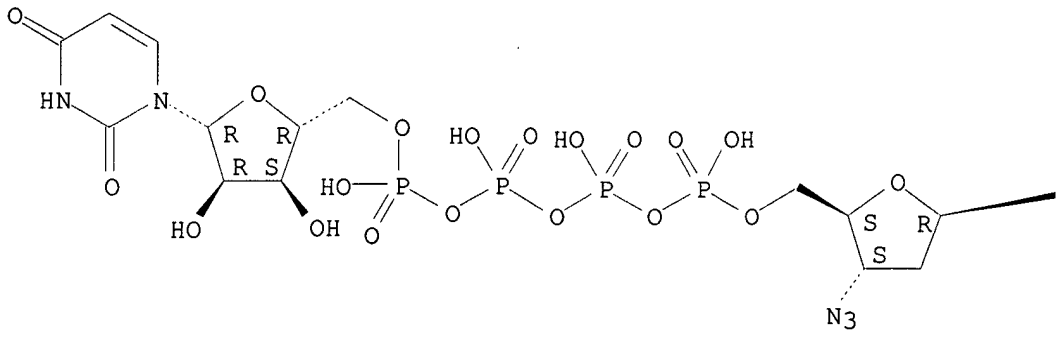
REFERENCE 2: 135:298823

REFERENCE 3: 129:175919

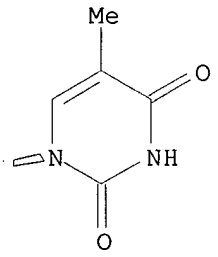
L141 ANSWER 17 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **211448-79-2** REGISTRY
CN Thymidine 5'-(pentahydrogen tetraphosphate), 3'-azido-3'-deoxy-, P'''.fwdarw.5'-ester with uridine (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C19 H27 N7 O21 P4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



3 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

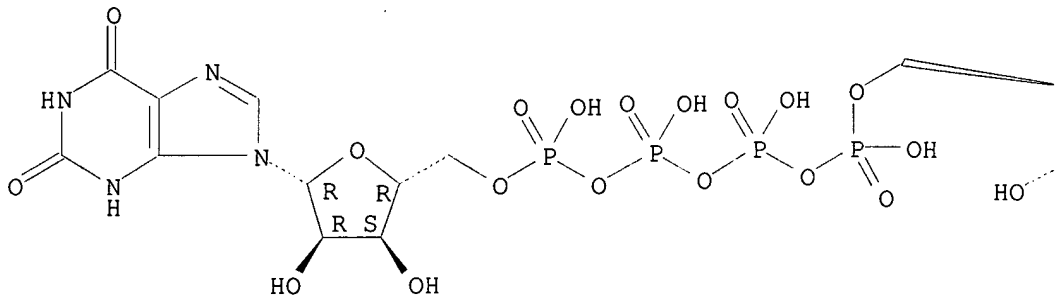
REFERENCE 2: 135:298823

REFERENCE 3: 129:175919

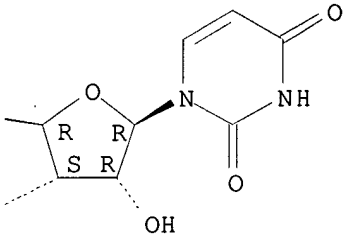
L141 ANSWER 18 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **211448-77-0** REGISTRY
CN Xanthosine 5'-(pentahydrogen tetraphosphate), P'''.fwdarw.5'-ester with uridine (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C19 H26 N6 O23 P4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

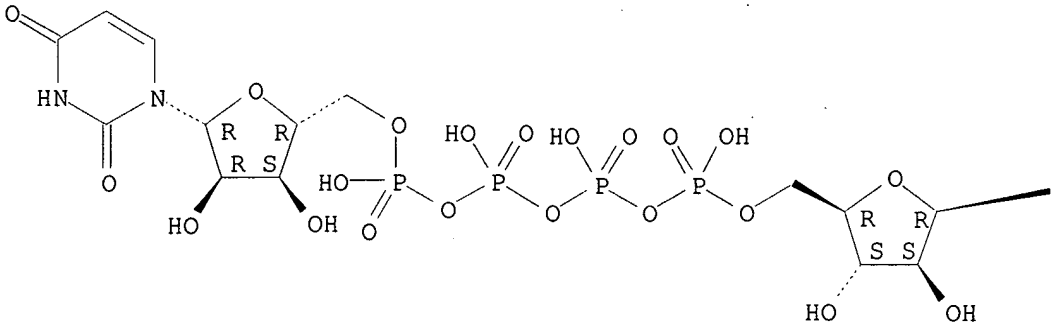
REFERENCE 2: 135:298823

REFERENCE 3: 129:175919

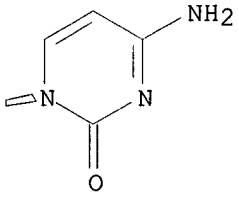
L141 ANSWER 19 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **211448-76-9** REGISTRY
CN Uridine 5'-(pentahydrogen tetraphosphate), P'''.fwdarw.5'-ester with 4-amino-1-.beta.-D-arabinofuranosyl-2(1H)-pyrimidinone (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C18 H27 N5 O22 P4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

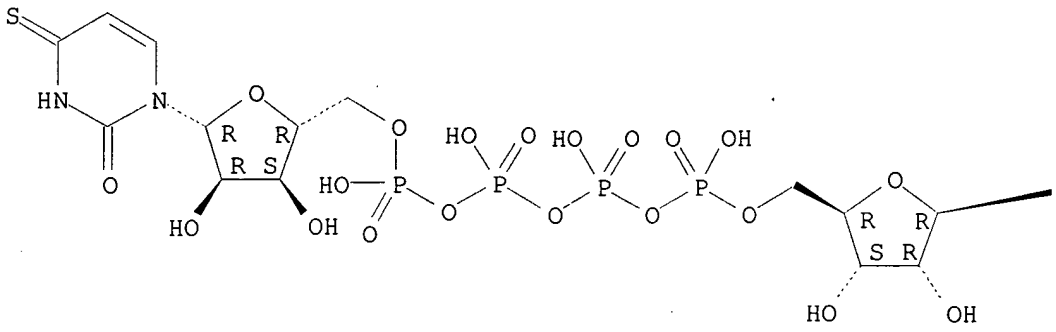
REFERENCE 2: 135:298823

REFERENCE 3: 129:175919

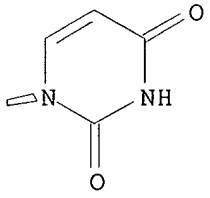
L141 ANSWER 20 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **211448-75-8** REGISTRY
CN Uridine 5'-(pentahydrogen tetraphosphate), 4-thio-, P'''.fwdarw.5'-ester with uridine (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C18 H26 N4 O22 P4 S
CI COM
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

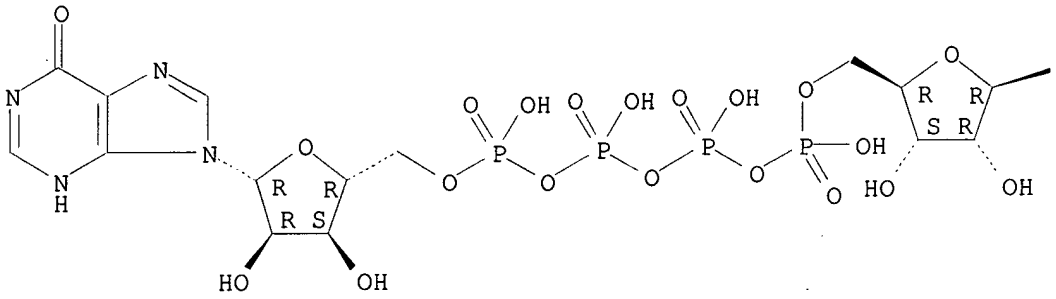
REFERENCE 2: 135:298823

REFERENCE 3: 129:175919

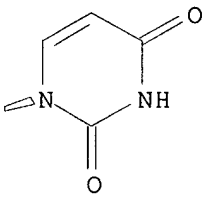
L141 ANSWER 21 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **211448-74-7** REGISTRY
CN Inosine 5'-(pentahydrogen tetraphosphate), P'''.fwdarw.5'-ester with uridine (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C19 H26 N6 O22 P4
CI COM
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

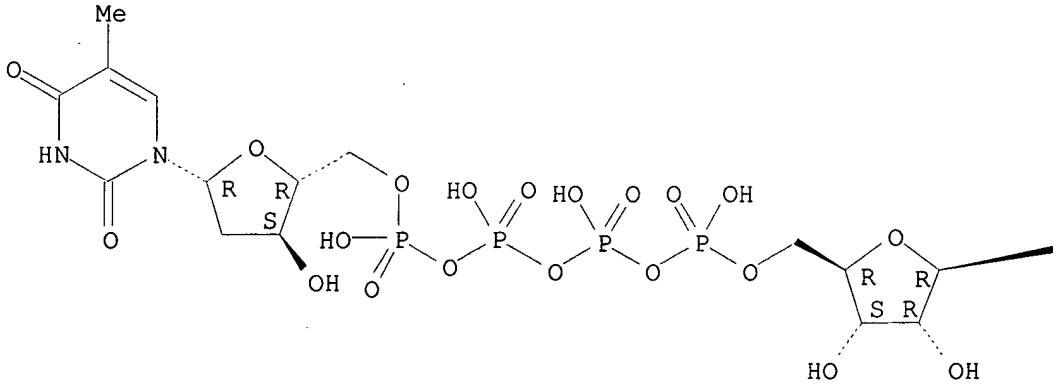
REFERENCE 2: 135:298823

REFERENCE 3: 129:175919

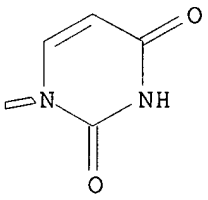
L141 ANSWER 22 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **211448-73-6** REGISTRY
CN Thymidine 5'-(pentahydrogen tetraphosphate), P'''.fwdarw.5'-ester with uridine (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C19 H28 N4 O22 P4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

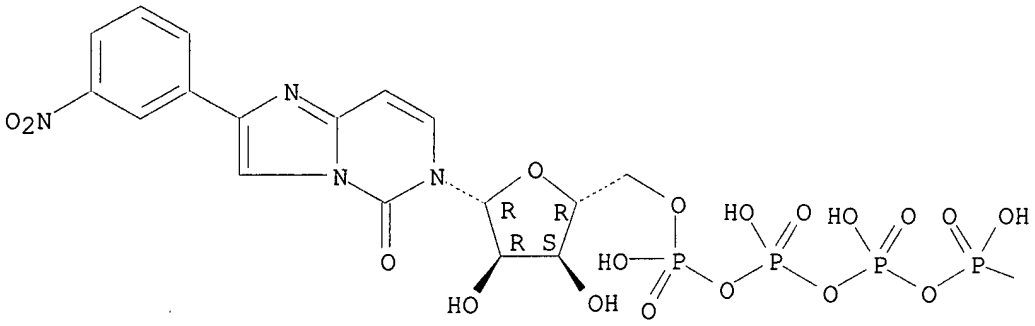
REFERENCE 2: 135:298823

REFERENCE 3: 129:175919

L141 ANSWER 23 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **211448-72-5** REGISTRY
CN Imidazo[1,2-c]pyrimidin-5(6H)-one, 6-[5-O-[hydroxy[[hydroxy[[hydroxy(phosphonooxy)phosphinyl]oxy]phosphinyl]oxy]phosphinyl]-.beta.-D-ribofuranosyl]-2-(3-nitrophenyl)-, P'''.fwdarw.5'-ester with 2-(3-nitrophenyl)-6-.beta.-D-ribofuranosylimidazo[1,2-c]pyrimidin-5(6H)-one, tetraammonium salt (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C34 H34 N8 O25 P4 . 4 H3 N
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

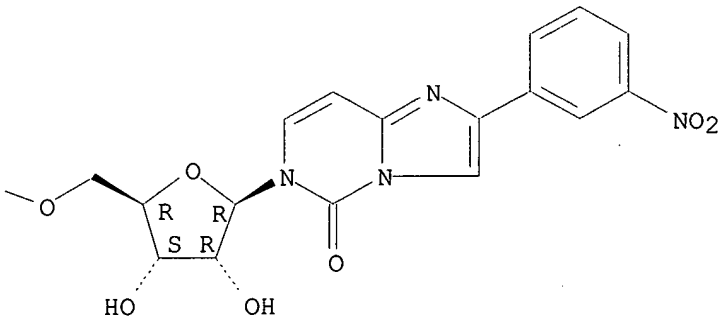
Absolute stereochemistry.

PAGE 1-A



● 4 NH_3

PAGE 1-B



3 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

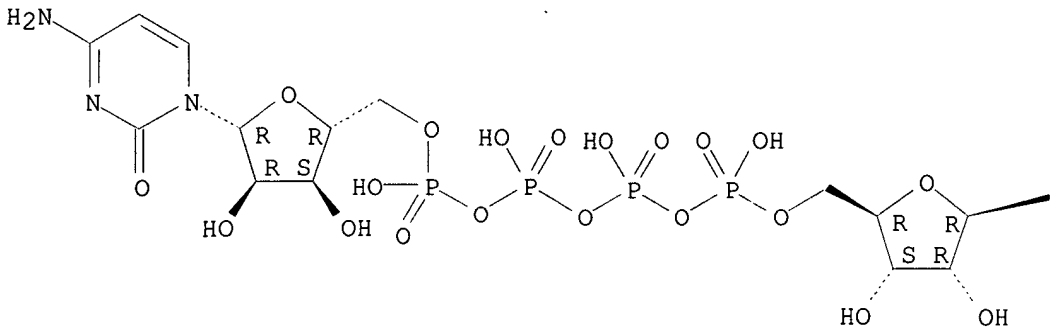
REFERENCE 2: 135:298823

REFERENCE 3: 129:175919

L141 ANSWER 24 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **211448-71-4** REGISTRY
CN Cytidine 5'-(pentahydrogen tetraphosphate), P'''.fwdarw.5'-ester with cytidine, tetraammonium salt (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C18 H28 N6 O21 P4 . 4 H3 N
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
CRN (111035-55-3)

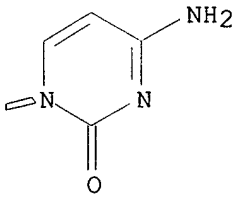
Absolute stereochemistry.

PAGE 1-A



● 4 NH_3

PAGE 1-B



2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

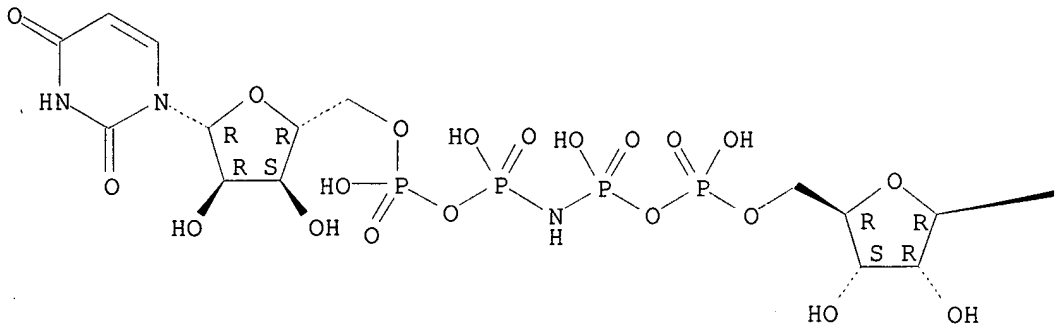
REFERENCE 1: 136:151393

REFERENCE 2: 129:175919

L141 ANSWER 25 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **211448-67-8** REGISTRY
CN 5'-Uridylic acid, 5'.fwdarw.P:5'''.fwdarw.P'-dianhydride with imidodiphosphoric acid, ammonium salt (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C18 H27 N5 O22 P4 . x H3 N
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
CRN (211427-10-0)

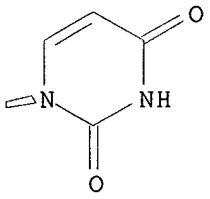
Absolute stereochemistry.

PAGE 1-A



●x NH_3

PAGE 1-B



2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

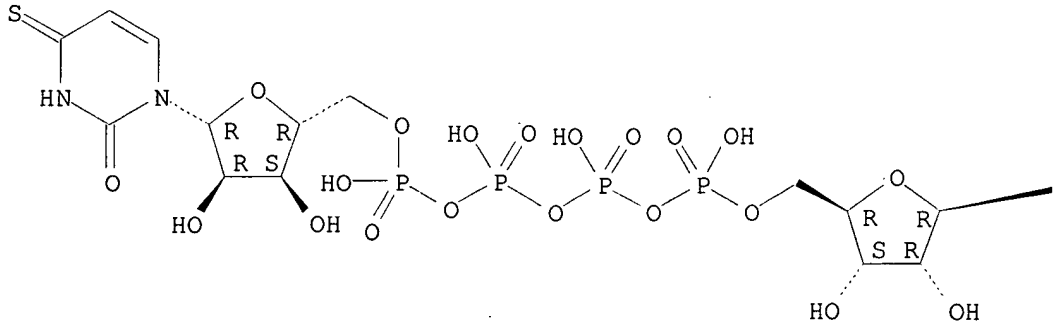
REFERENCE 1: 136:151393

REFERENCE 2: 129:175919

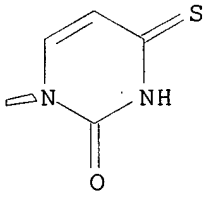
L141 ANSWER 26 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **211427-11-1** REGISTRY
CN Uridine 5'-(pentahydrogen tetraphosphate), 4-thio-, P'''.fwdarw.5'-ester with 4-thiouridine (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C18 H26 N4 O21 P4 S2
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1967 TO DATE)
4 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

REFERENCE 2: 135:298823

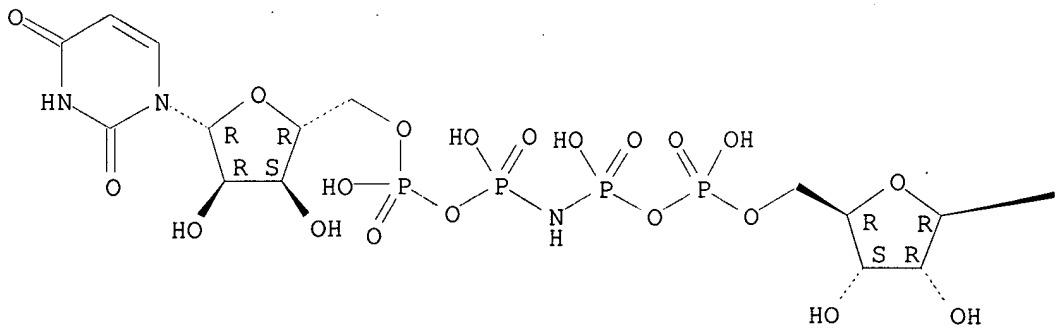
REFERENCE 3: 129:180137

REFERENCE 4: 129:175919

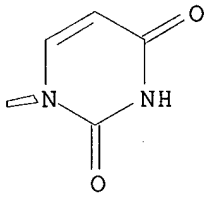
L141 ANSWER 27 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **211427-10-0** REGISTRY
CN 5'-Uridylic acid, 5'.fwdarw.P:5'''.fwdarw.P'-dianhydride with imidodiphosphoric acid (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C18 H27 N5 O22 P4
CI COM
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

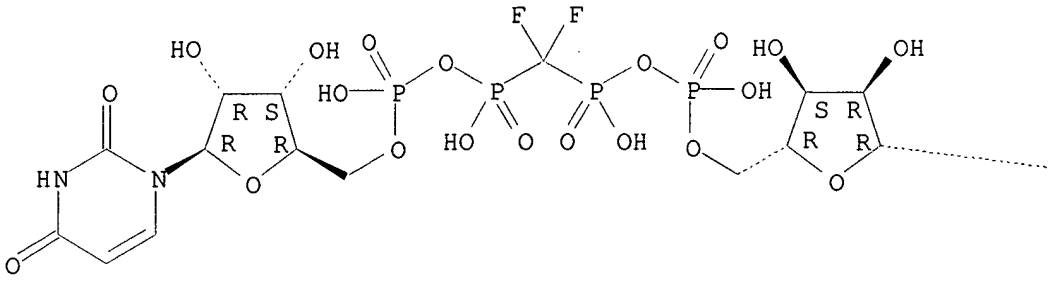
REFERENCE 1: 135:298823

REFERENCE 2: 129:180137

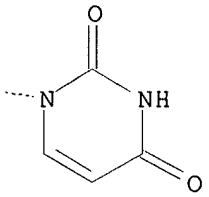
L141 ANSWER 28 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **211427-09-7** REGISTRY
CN 5'-Uridylic acid, 5'.fwdarw.P:5'''.fwdarw.P'-dianhydride with (difluoromethylene)bis[phosphonic acid] (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C19 H26 F2 N4 O22 P4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1967 TO DATE)
4 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

REFERENCE 2: 135:298823

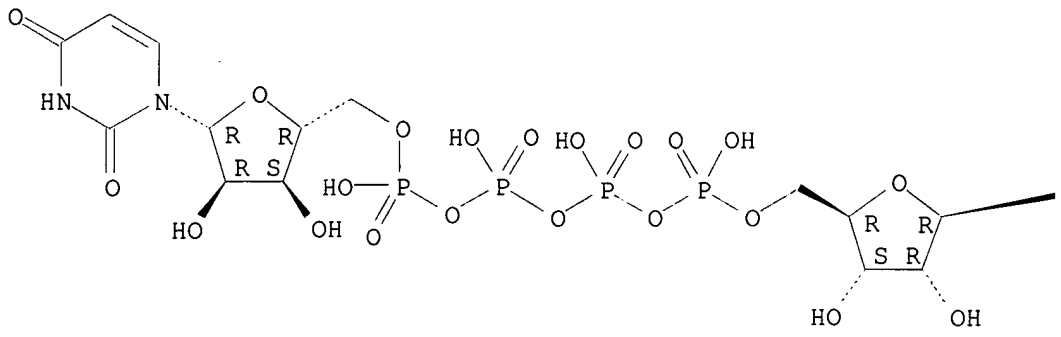
REFERENCE 3: 129:180137

REFERENCE 4: 129:175919

L141 ANSWER 29 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **211427-08-6** REGISTRY
CN Uridine 5'-(pentahydrogen tetraphosphate), P'''.fwdarw.5'-ester with uridine, tetrasodium salt (9CI) (CA INDEX NAME)
OTHER NAMES:
CN INS 365
CN P1,P4-Diuridine 5'-tetraphosphate tetrasodium salt
FS STEREOSEARCH
DR 266356-23-4
MF C18 H26 N4 O23 P4 . 4 Na
SR CA
LC STN Files: BIOSIS, CA, CAPLUS, CASREACT, DRUGPAT, DRUGUPDATES, PHAR, TOXCENTER, USPATFULL
CRN (59985-21-6)

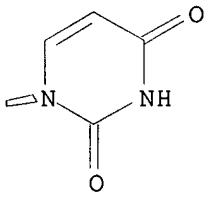
Absolute stereochemistry.

PAGE 1-A



●4 Na

PAGE 1-B



12 REFERENCES IN FILE CA (1967 TO DATE)
13 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:200422

REFERENCE 2: 136:164777

REFERENCE 3: 136:47750

REFERENCE 4: 136:705

REFERENCE 5: 135:358114

REFERENCE 6: 135:142283

REFERENCE 7: 135:87137

REFERENCE 8: 134:252575

REFERENCE 9: 132:317843

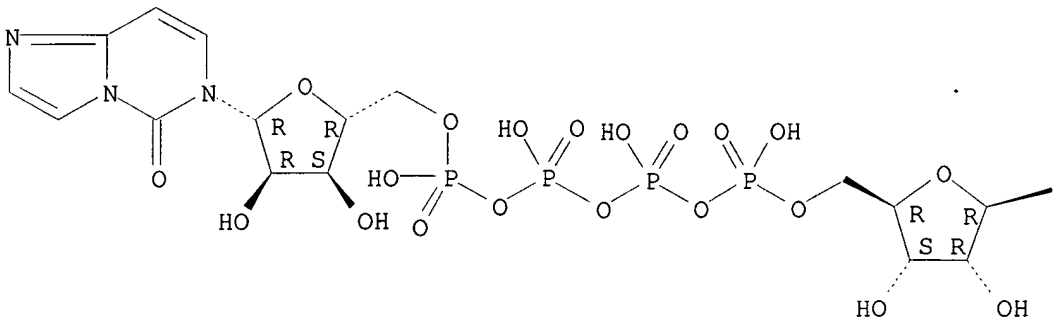
REFERENCE 10: 132:265443

L141 ANSWER 30 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **211427-07-5** REGISTRY
CN Imidazo[1,2-c]pyrimidin-5(6H)-one, 6-[5-O-[hydroxy[[hydroxy[[hydroxy(phosp

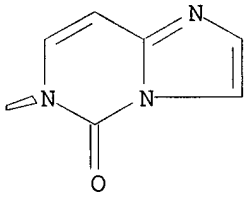
honooxy)phosphinyl]oxy]phosphinyl]oxy]phosphinyl]-.beta.-D-ribofuranosyl]-, P'''.fwdarw.5'-ester with 6-.beta.-D-ribofuranosylimidazo[1,2-c]pyrimidin-5(6H)-one (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C22 H28 N6 O21 P4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1967 TO DATE)
4 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

REFERENCE 2: 135:298823

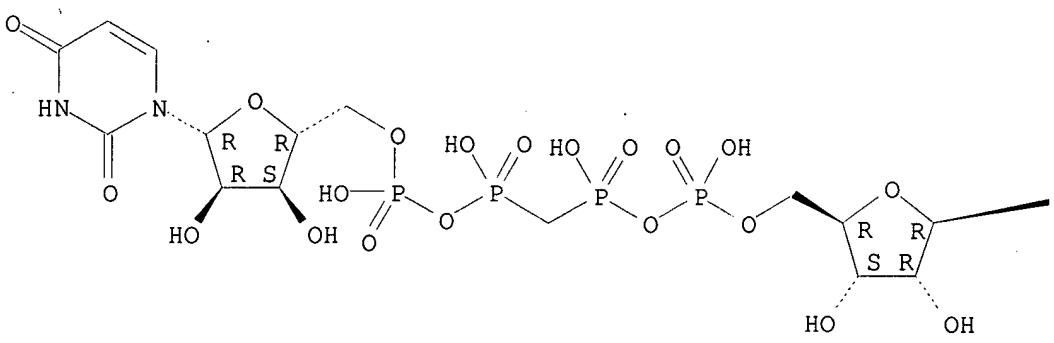
REFERENCE 3: 129:180137

REFERENCE 4: 129:175919

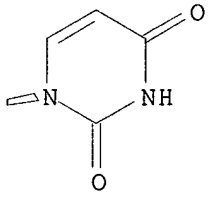
L141 ANSWER 31 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **211427-06-4** REGISTRY
CN 5'-Uridylic acid, 5'.fwdarw.P:5'''.fwdarw.P'-dianhydride with methylenebis[phosphonic acid] (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C19 H28 N4 O22 P4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1967 TO DATE)
4 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

REFERENCE 2: 135:298823

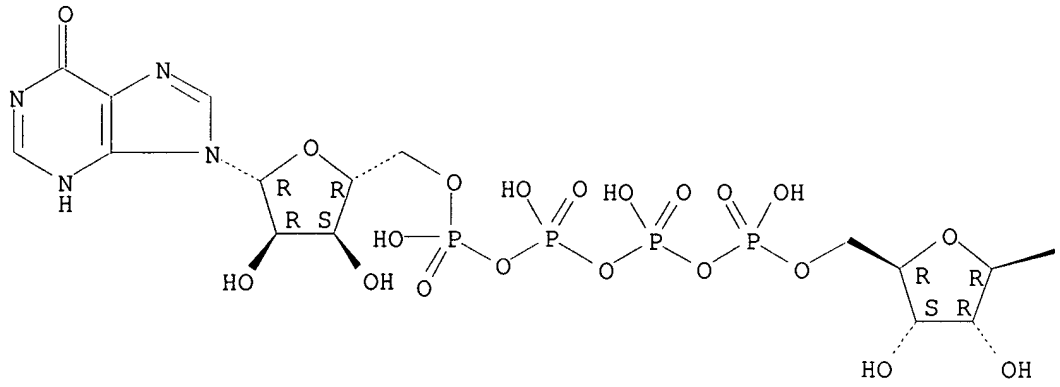
REFERENCE 3: 129:180137

REFERENCE 4: 129:175919

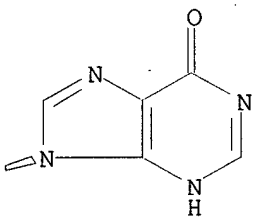
L141 ANSWER 32 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **188560-02-3** REGISTRY
CN Inosine 5'-(pentahydrogen tetraphosphate), P'''.fwdarw.5'-ester with inosine (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Diinosine tetraphosphate
FS STEREOSEARCH
MF C20 H26 N8 O21 P4
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1967 TO DATE)
4 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:690

REFERENCE 2: 135:298493

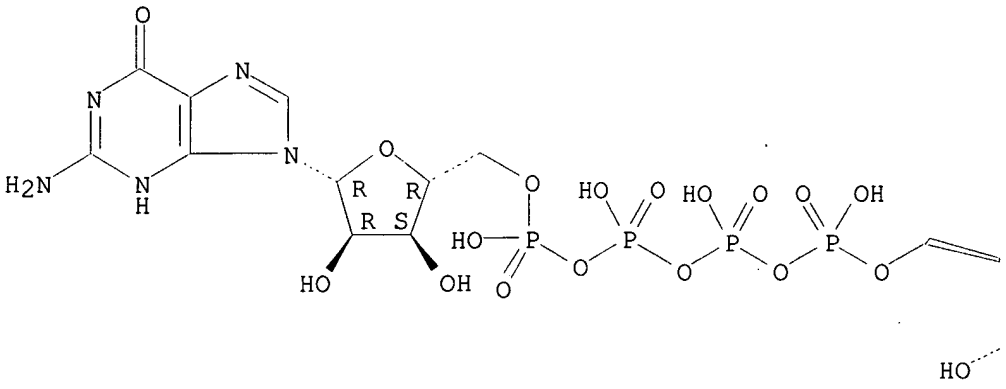
REFERENCE 3: 132:44923

REFERENCE 4: 126:233761

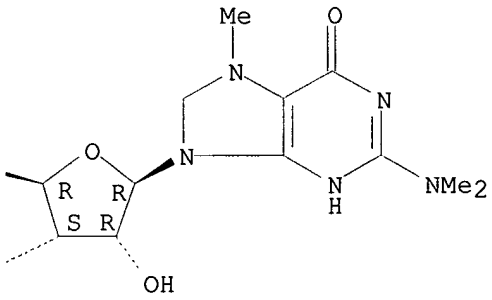
L141 ANSWER 33 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **170638-62-7** REGISTRY
CN Guanosine 5'-(pentahydrogen tetraphosphate), N,N,7-trimethyl-, P'''.fwdarw.5'-ester with guanosine (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Guanosine 5'-(pentahydrogen tetraphosphate), P'''.fwdarw.5'-ester with 2-(dimethylamino)-6,9-dihydro-7-methyl-6-oxo-9-.beta.-D-ribofuranosyl-1H-purinium
FS STEREOSEARCH
DR 211448-99-6
MF C23 H35 N10 O21 P4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



*** FRAGMENT DIAGRAM IS INCOMPLETE ***
3 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

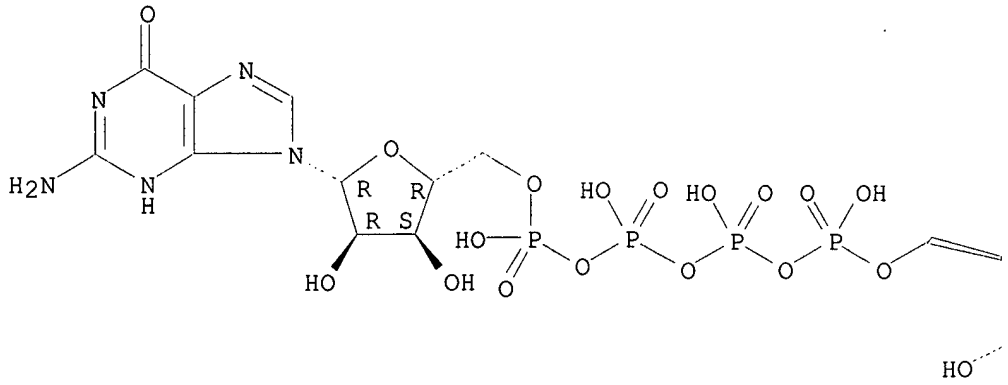
REFERENCE 2: 129:175919

REFERENCE 3: 123:340747

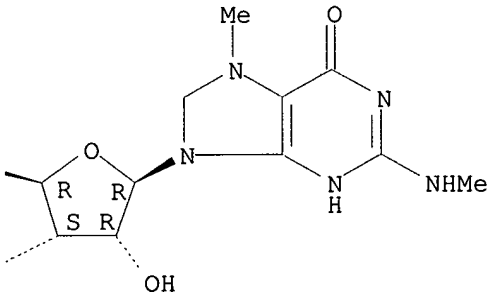
L141 ANSWER 34 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **170638-61-6** REGISTRY
CN Guanosine 5'-(pentahydrogen tetraphosphate), N,7-dimethyl-, P'''.fwdarw.5'-ester with guanosine (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Guanosine 5'-(pentahydrogen tetraphosphate), P''''.fwdarw.5'-ester with 6,9-dihydro-7-methyl-2-(methylamino)-6-oxo-9-.beta.-D-ribofuranosyl-1H-purinium
FS STEREOSEARCH
DR 211448-98-5
MF C22 H33 N10 O21 P4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



*** FRAGMENT DIAGRAM IS INCOMPLETE ***
3 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

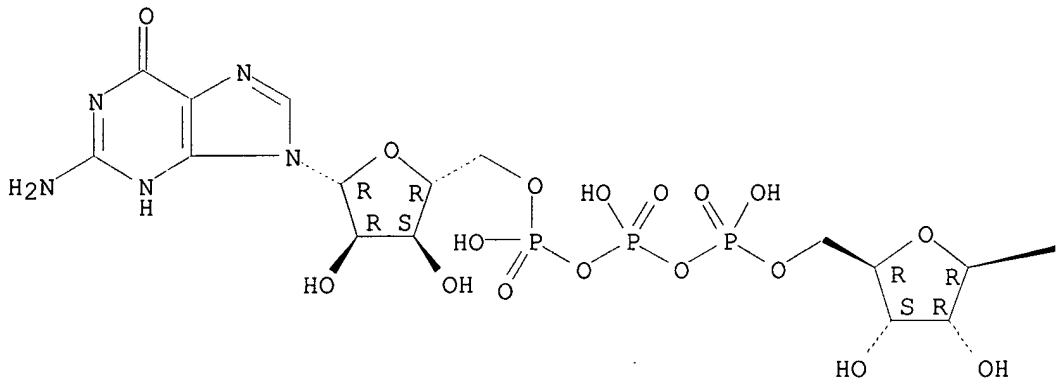
REFERENCE 2: 129:175919

REFERENCE 3: 123:340747

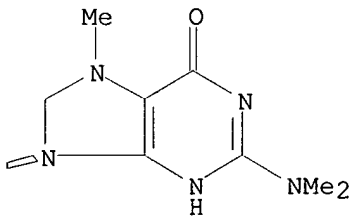
L141 ANSWER 35 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **170638-60-5** REGISTRY
CN Guanosine 5'-(tetrahydrogen triphosphate), N,N,7-trimethyl-, P''.fwdarw.5'-ester with guanosine (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Guanosine 5'-(tetrahydrogen triphosphate), P''.fwdarw.5'-ester with 2-(dimethylamino)-6,9-dihydro-7-methyl-6-oxo-9-.beta.-D-ribofuranosyl-1H-purinium
FS STEREOSEARCH
DR 211448-90-7
MF C23 H34 N10 O18 P3
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



*** FRAGMENT DIAGRAM IS INCOMPLETE ***
4 REFERENCES IN FILE CA (1967 TO DATE)
4 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

REFERENCE 2: 129:175919

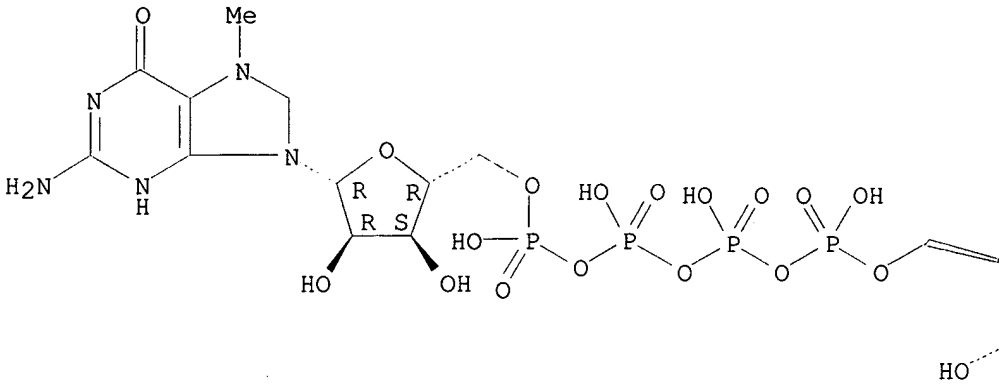
REFERENCE 3: 127:343026

REFERENCE 4: 123:340747

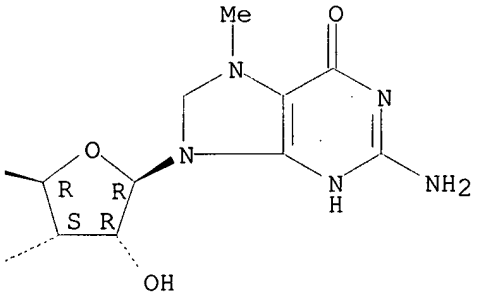
L141 ANSWER 36 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **170638-59-2** REGISTRY
CN Guanosine 5'-(pentahydrogen tetraphosphate), 7-methyl-, P'''.fwdarw.5'-ester with 7-methylguanosine (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1H-Purinium, 2-amino-6,9-dihydro-9-[5-O-[hydroxy[[hydroxy[[hydroxy(phosphonooxy)phosphinyl]oxy]phosphinyl]oxy]phosphinyl]-.beta.-D-ribofuranosyl]-7-methyl-6-oxo-, inner salt, P'''.fwdarw.5'-ester with 2-amino-6,9-dihydro-7-methyl-6-oxo-9-.beta.-D-ribofuranosyl-1H-purinium
FS STEREOSEARCH
DR 211448-92-9
MF C22 H34 N10 O21 P4
SR CA
LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



*** FRAGMENT DIAGRAM IS INCOMPLETE ***
3 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

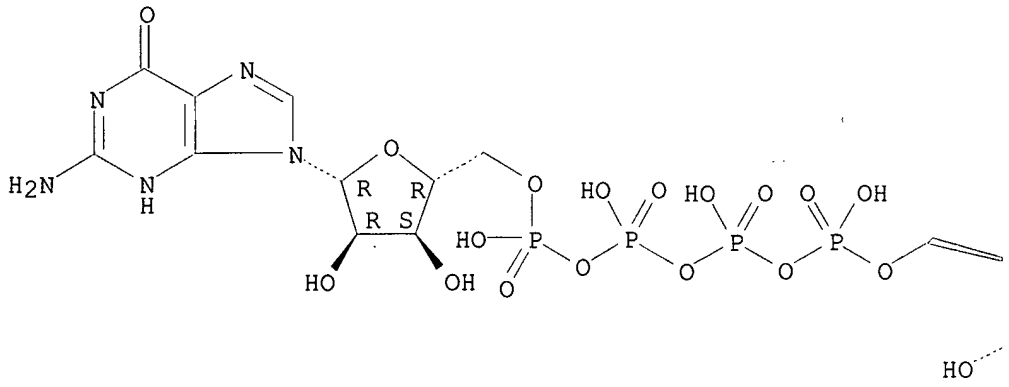
REFERENCE 2: 129:175919

REFERENCE 3: 123:340747

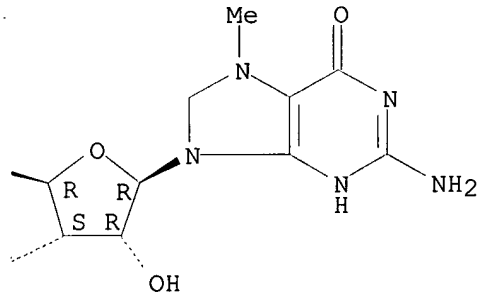
L141 ANSWER 37 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **170638-58-1** REGISTRY
CN Guanosine 5'-(pentahydrogen tetraphosphate), 7-methyl-, P'''.fwdarw.5'-ester with guanosine (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Guanosine 5'-(pentahydrogen tetraphosphate), P'''.fwdarw.5'-ester with 2-amino-6,9-dihydro-7-methyl-6-oxo-9-.beta.-D-ribofuranosyl-1H-purinium
FS STEREOSEARCH
DR 211448-97-4
MF C21 H31 N10 O21 P4
SR CA
LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



*** FRAGMENT DIAGRAM IS INCOMPLETE ***
4 REFERENCES IN FILE CA (1967 TO DATE)
4 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

REFERENCE 2: 129:175919

REFERENCE 3: 127:343026

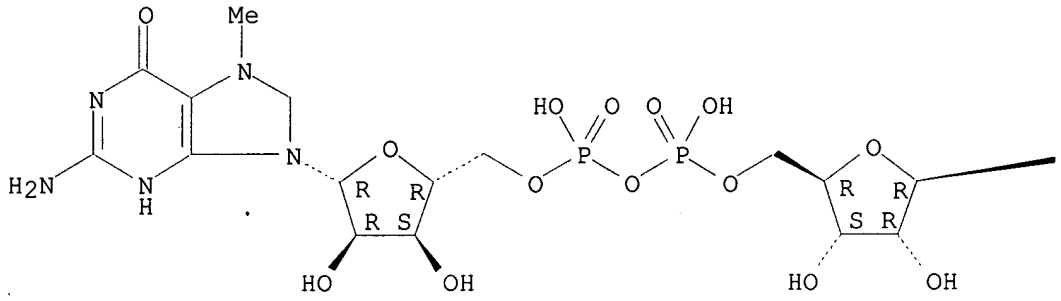
REFERENCE 4: 123:340747

L141 ANSWER 38 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **170638-57-0** REGISTRY
CN Guanosine 5'-(trihydrogen diphosphate), 7-methyl-, P'.fwdarw.5'-ester with 7-methylguanosine (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1H-Purinium, 2-amino-6,9-dihydro-9-[5-O-[hydroxy(phosphonooxy)phosphinyl]-.beta.-D-ribofuranosyl]-7-methyl-6-oxo-, P'.fwdarw.5'-ester with 2-amino-6,9-dihydro-7-methyl-6-oxo-9-.beta.-D-ribofuranosyl-1H-purinium
FS STEREOSEARCH
DR 211448-86-1
MF C22 H32 N10 O15 P2
CI COM
SR CA

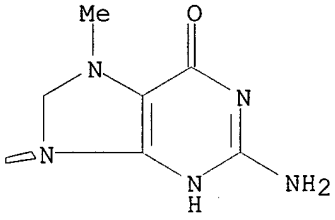
LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



*** FRAGMENT DIAGRAM IS INCOMPLETE ***
3 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

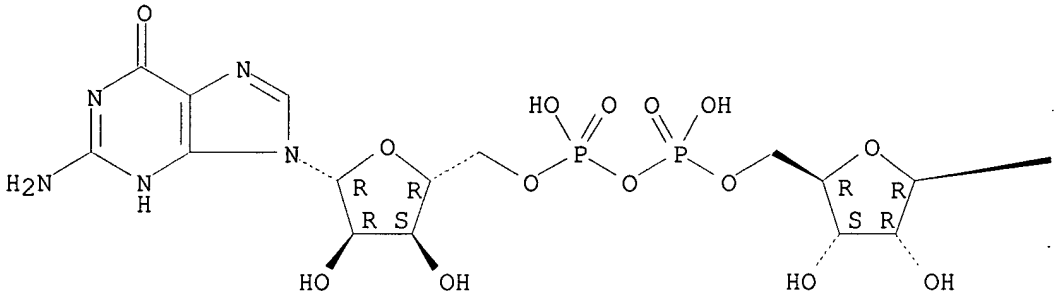
REFERENCE 2: 129:175919

REFERENCE 3: 123:340747

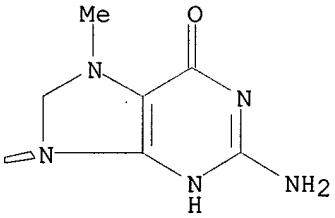
L141 ANSWER 39 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **170638-56-9** REGISTRY
CN Guanosine 5'-(trihydrogen diphosphate), 7-methyl-, P'.fwdarw.5'-ester with guanosine (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Guanosine 5'-(trihydrogen diphosphate), P'.fwdarw.5'-ester with 2-amino-6,9-dihydro-7-methyl-6-oxo-9-.beta.-D-ribofuranosyl-1H-purinium
FS STEREOSEARCH
DR 211448-87-2
MF C21 H29 N10 O15 P2
CI COM
SR CA
LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



*** FRAGMENT DIAGRAM IS INCOMPLETE ***
4 REFERENCES IN FILE CA (1967 TO DATE)
4 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

REFERENCE 2: 129:175919

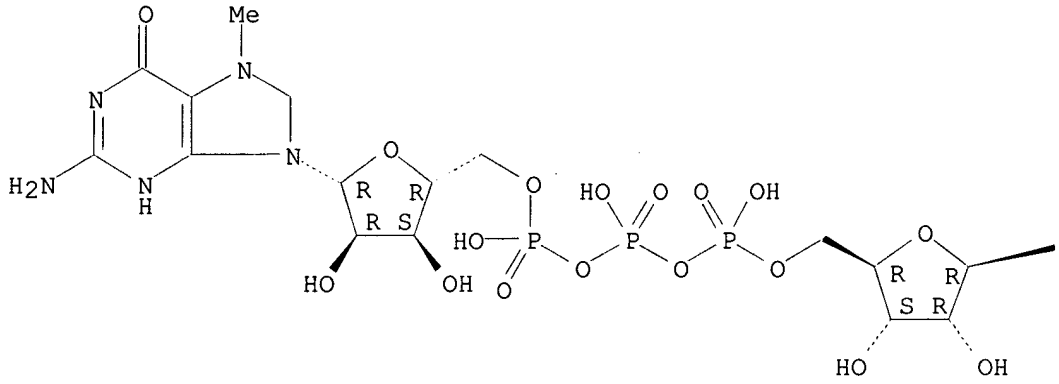
REFERENCE 3: 127:343026

REFERENCE 4: 123:340747

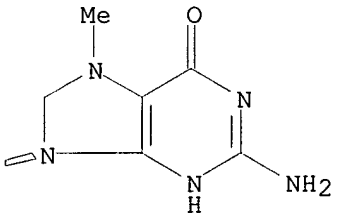
L141 ANSWER 40 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **154960-70-0** REGISTRY
CN Guanosine 5'-(tetrahydrogen triphosphate), 7-methyl-, P''.fwdarw.5'-ester with 7-methylguanosine (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1H-Purinium, 2-amino-6,9-dihydro-7-methyl-6-oxo-9-.beta.-D-ribofuranosyl-, 5'.fwdarw.P:5'''.fwdarw.P''-(trihydrogen triphosphate)
FS STEREOSEARCH
DR 211448-89-4
MF C22 H33 N10 O18 P3
SR CA
LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



*** FRAGMENT DIAGRAM IS INCOMPLETE ***
4 REFERENCES IN FILE CA (1967 TO DATE)
4 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

REFERENCE 2: 129:175919

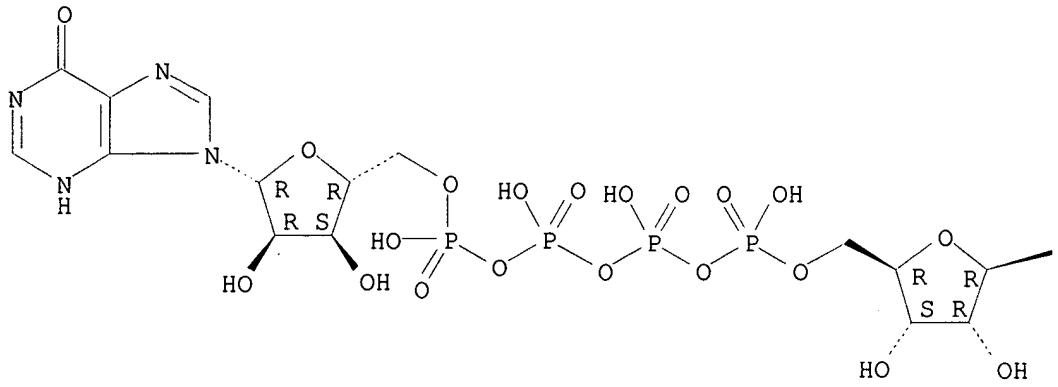
REFERENCE 3: 123:340747

REFERENCE 4: 120:299198

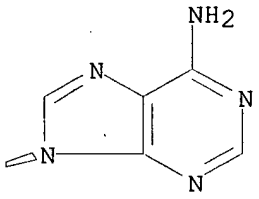
L141 ANSWER 41 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **148503-84-8** REGISTRY
CN Inosine 5'-(pentahydrogen tetraphosphate), P''''.fwdarw.5'-ester with adenosine (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C20 H27 N9 O20 P4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

7 REFERENCES IN FILE CA (1967 TO DATE)
7 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 135:298823

REFERENCE 2: 129:287192

REFERENCE 3: 127:95515

REFERENCE 4: 125:215341

REFERENCE 5: 125:136013

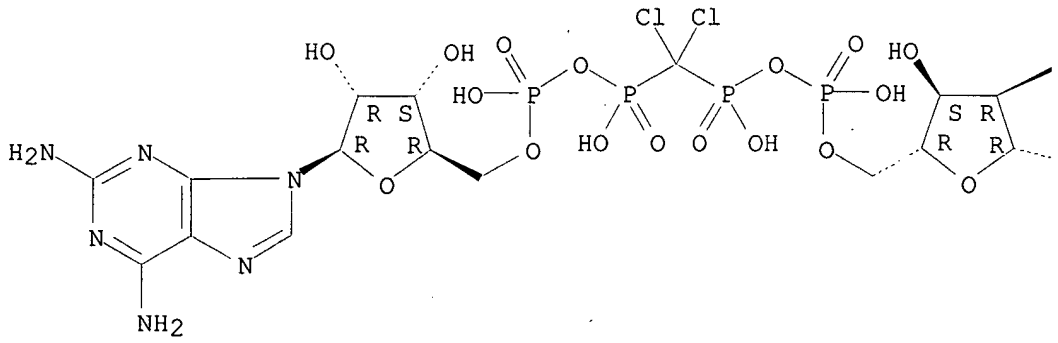
REFERENCE 6: 120:8922

REFERENCE 7: 119:49812

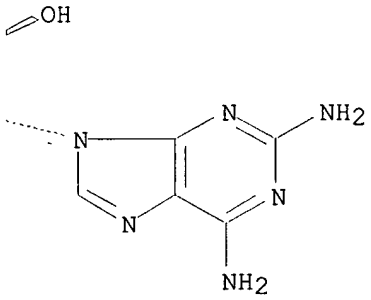
L141 ANSWER 42 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **135802-64-1** REGISTRY
CN 5'-Adenylic acid, 2-amino-, 5'.fwdarw.P:5'''.fwdarw.P'-dianhydride with (dichloromethylene)bis[phosphonic acid] (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C21 H30 Cl2 N12 O18 P4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

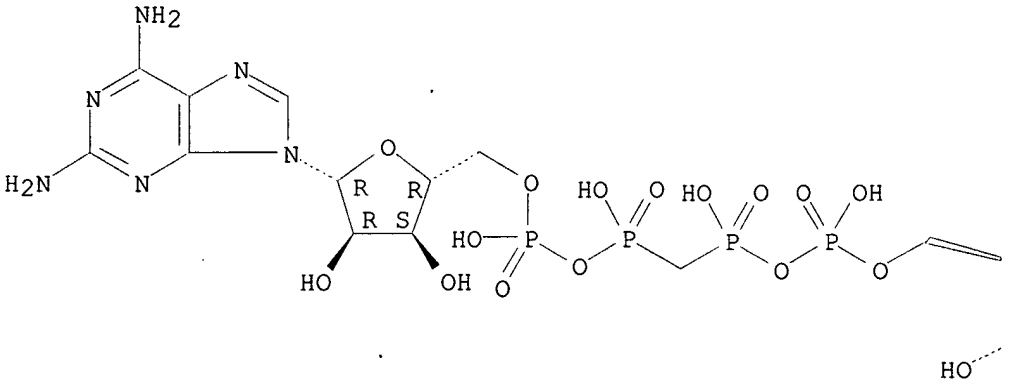
REFERENCE 2: 129:175919

REFERENCE 3: 115:114980

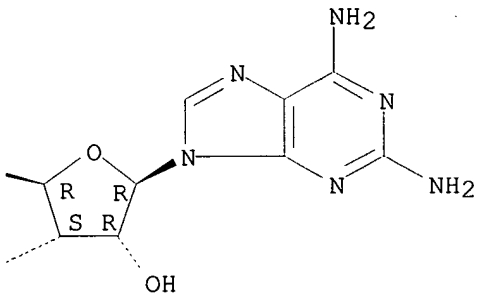
L141 ANSWER 43 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **135780-92-6** REGISTRY
CN 5'-Adenylic acid, 2-amino-, 5'.fwdarw.P:5'''.fwdarw.P'-dianhydride with methylenebis[phosphonic acid] (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C21 H32 N12 O18 P4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

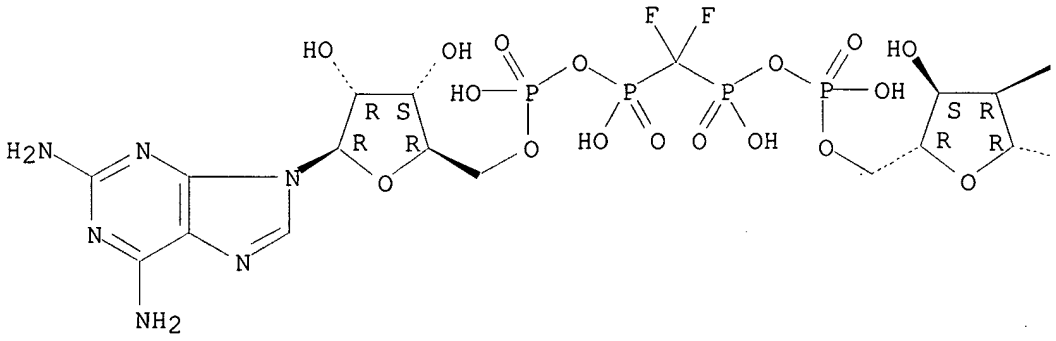
REFERENCE 2: 129:175919

REFERENCE 3: 115:114980

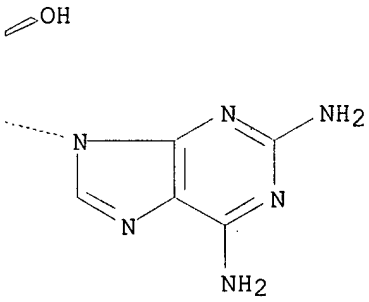
L141 ANSWER 44 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **135780-85-7** REGISTRY
CN 5'-Adenylic acid, 2-amino-, 5'.fwdarw.P:5'''.fwdarw.P'-dianhydride with (difluoromethylene)bis[phosphonic acid] (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C21 H30 F2 N12 O18 P4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

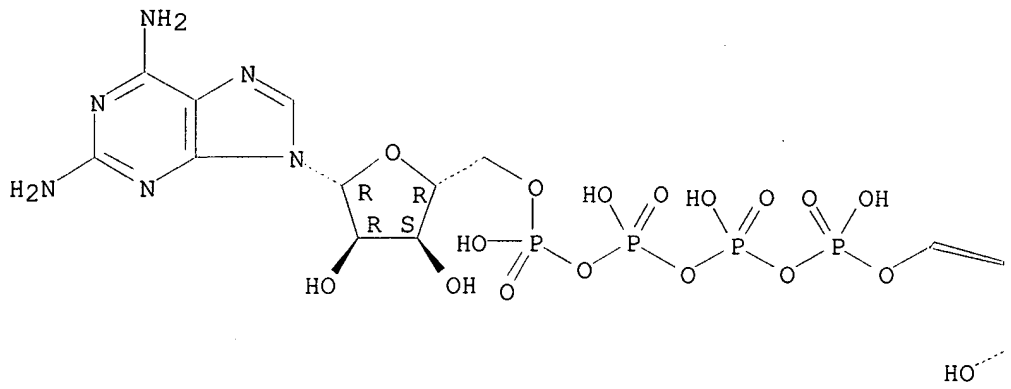
REFERENCE 2: 129:175919

REFERENCE 3: 115:114980

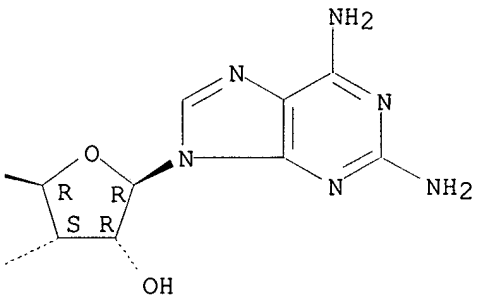
L141 ANSWER 45 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **135780-83-5** REGISTRY
CN Adenosine 5'-(pentahydrogen tetraphosphate), 2-amino-,
P''''.fwdarw.5'-ester with 2-aminoadenosine (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C20 H30 N12 O19 P4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1967 TO DATE)
4 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

REFERENCE 2: 129:175919

REFERENCE 3: 118:250254

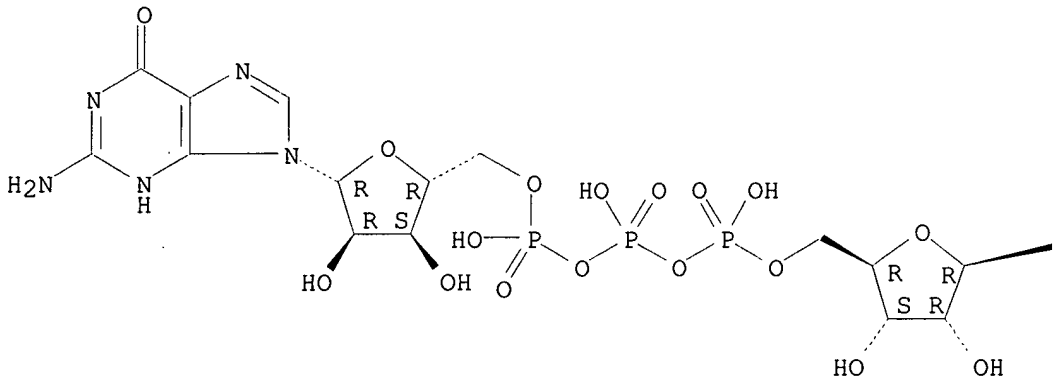
REFERENCE 4: 115:114980

L141 ANSWER 46 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **134311-47-0** REGISTRY
CN Guanosine 5'-(tetrahydrogen triphosphate), N,7-dimethyl-, P''.fwdarw.5'-ester with guanosine (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Guanosine 5'-(tetrahydrogen triphosphate), P''.fwdarw.5'-ester with 6,9-dihydro-7-methyl-2-(methylamino)-6-oxo-9-.beta.-D-ribofuranosyl-1H-purinium
FS STEREOSEARCH
DR 211448-91-8
MF C22 H32 N10 O18 P3

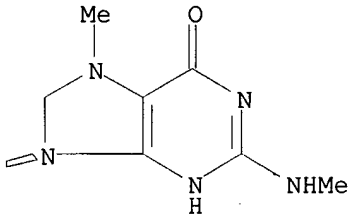
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



*** FRAGMENT DIAGRAM IS INCOMPLETE ***
4 REFERENCES IN FILE CA (1967 TO DATE)
4 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

REFERENCE 2: 129:175919

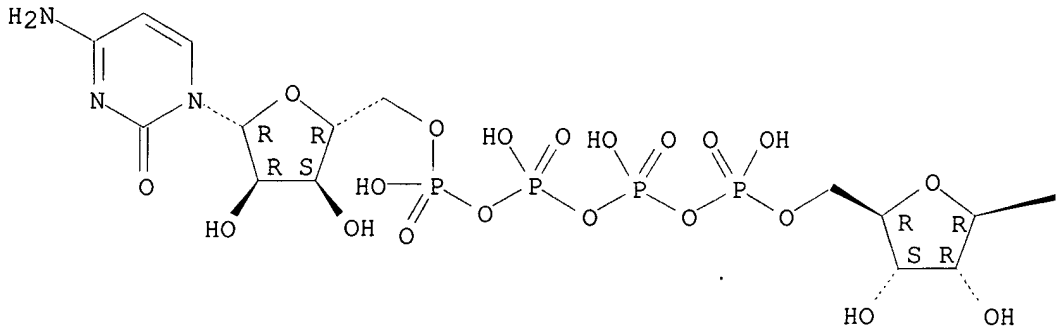
REFERENCE 3: 123:340747

REFERENCE 4: 115:44346

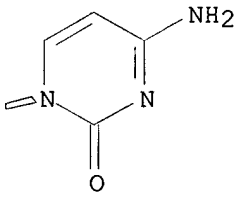
L141 ANSWER 47 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **111035-55-3** REGISTRY
CN Cytidine 5'-(pentahydrogen tetraphosphate), P'''.fwdarw.5'-ester with cytidine (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C18 H28 N6 O21 P4
CI COM
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

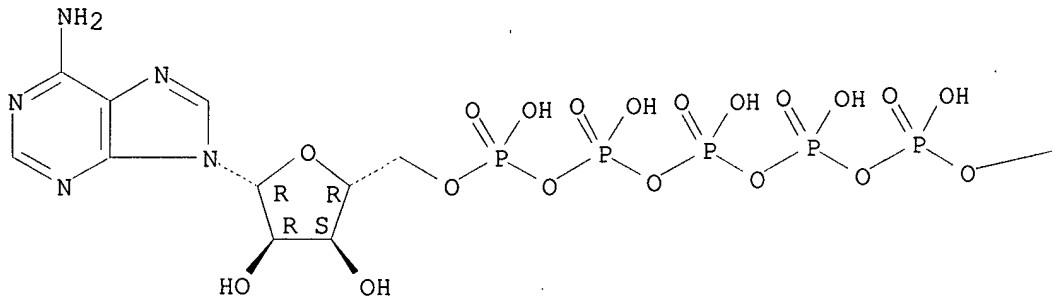
REFERENCE 2: 129:175919

REFERENCE 3: 107:232748

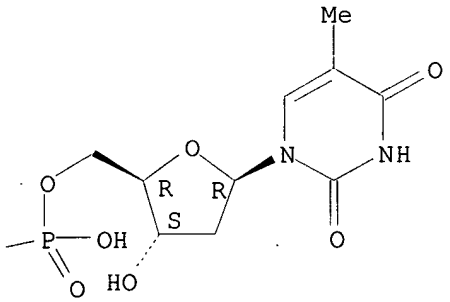
L141 ANSWER 48 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **103137-89-9** REGISTRY
CN Adenosine 5'-(heptahydrogen hexaphosphate), P'''''.fwdarw.5'-ester with thymidine (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C20 H31 N7 O26 P6
CI COM
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

6 REFERENCES IN FILE CA (1967 TO DATE)
6 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

REFERENCE 2: 129:175919

REFERENCE 3: 119:176516

REFERENCE 4: 108:182674

REFERENCE 5: 105:221543

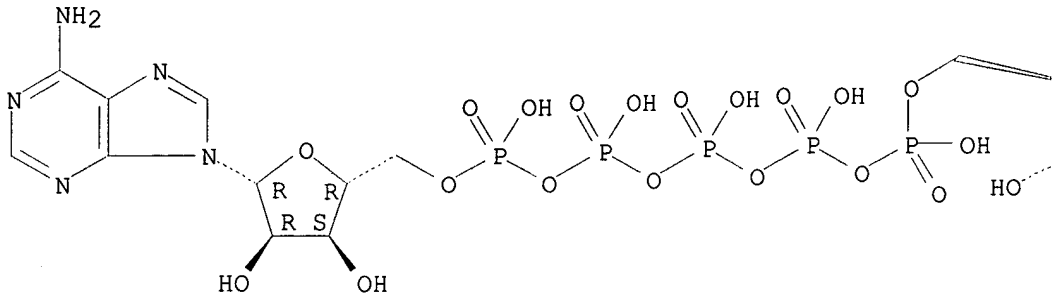
REFERENCE 6: 105:38068

L141 ANSWER 49 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **103137-88-8** REGISTRY
CN Adenosine 5'-(hexahydrogen pentaphosphate), P''''.fwdarw.5'-ester with thymidine (9CI) (CA INDEX NAME)
FS STEREOSEARCH
DR 204640-72-2
MF C20 H30 N7 O23 P5
CI COM
SR CA

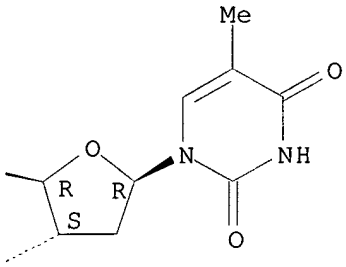
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

9 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
9 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

REFERENCE 2: 133:234384

REFERENCE 3: 130:121340

REFERENCE 4: 129:175919

REFERENCE 5: 128:227823

REFERENCE 6: 119:176516

REFERENCE 7: 108:182674

REFERENCE 8: 105:221543

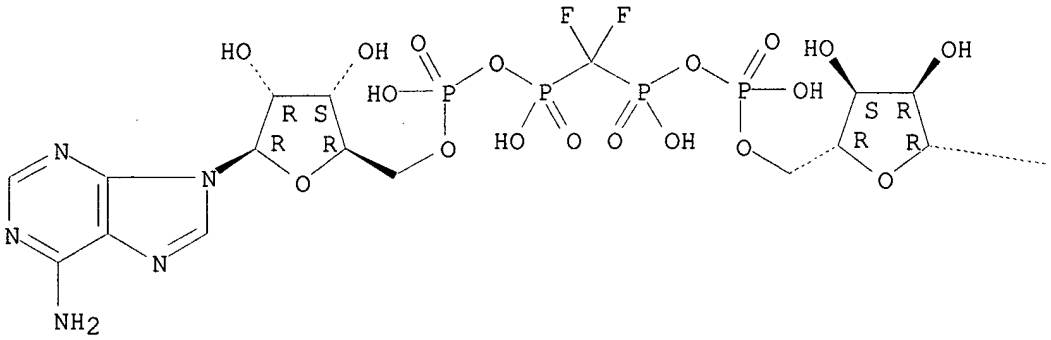
REFERENCE 9: 105:38068

L141 ANSWER 50 OF 81 REGISTRY COPYRIGHT 2002 ACS

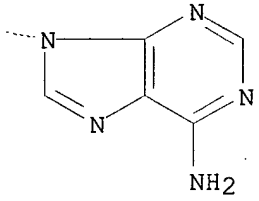
RN **97776-55-1** REGISTRY
CN 5'-Adenylic acid, 5'.fwdarw.P:5'''.fwdarw.P'-dianhydride with (difluoromethylene)bis[phosphonic acid] (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C21 H28 F2 N10 O18 P4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

9 REFERENCES IN FILE CA (1967 TO DATE)
9 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

REFERENCE 2: 129:175919

REFERENCE 3: 118:250254

REFERENCE 4: 113:54862

REFERENCE 5: 112:70015

REFERENCE 6: 111:190199

REFERENCE 7: 110:188318

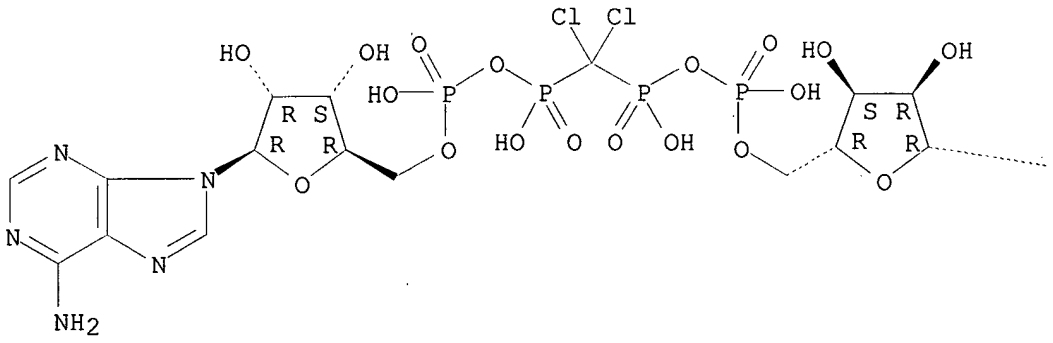
REFERENCE 8: 109:124879

REFERENCE 9: 103:88157

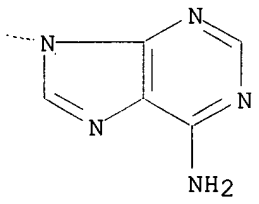
L141 ANSWER 51 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **97776-54-0** REGISTRY
CN 5'-Adenylic acid, 5'.fwdarw.P,5'''.fwdarw.P'-dianhydride with (dichloromethylene)bis[phosphonic acid] (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C21 H28 Cl2 N10 O18 P4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

10 REFERENCES IN FILE CA (1967 TO DATE)
10 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

REFERENCE 2: 129:175919

REFERENCE 3: 118:250254

REFERENCE 4: 113:54862

REFERENCE 5: 112:70015

REFERENCE 6: 111:190199

REFERENCE 7: 110:188318

REFERENCE 8: 109:124879

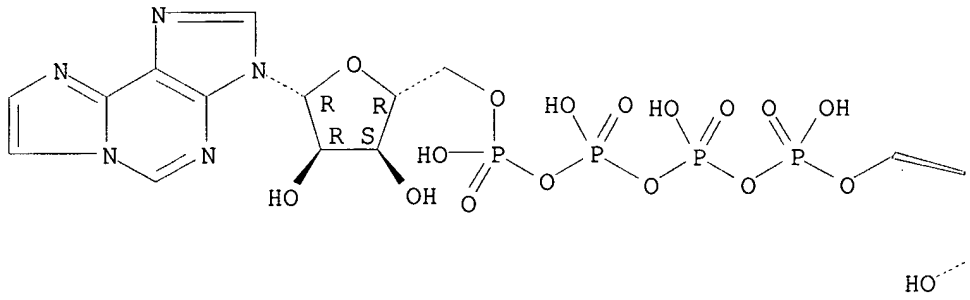
REFERENCE 9: 108:127515

REFERENCE 10: 103:88157

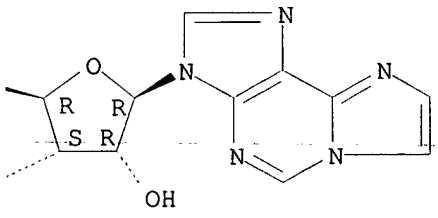
L141 ANSWER 52 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **96920-51-3** REGISTRY
CN 3H-Imidazo[2,1-i]purine, 3-[5-O-[hydroxy[[hydroxy[[hydroxy(phosphonooxy)phosphinyl]oxy]phosphinyl]oxy]phosphinyl]-.beta.-D-ribofuranosyl]-, P'''.fwdarw.5'-ester with 3-.beta.-D-ribofuranosyl-3H-imidazo[2,1-i]purine (9CI) (CA INDEX NAME)
FS STEREOSEARCH
DR 143721-41-9
MF C24 H28 N10 O19 P4
LC STN Files: CA, CAPLUS, MEDLINE, TOXCENTER, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

15 REFERENCES IN FILE CA (1967 TO DATE)
15 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

REFERENCE 2: 135:339673

REFERENCE 3: 135:298823

REFERENCE 4: 129:175919

REFERENCE 5: 127:344236

REFERENCE 6: 124:80241

REFERENCE 7: 123:105909

REFERENCE 8: 119:49812

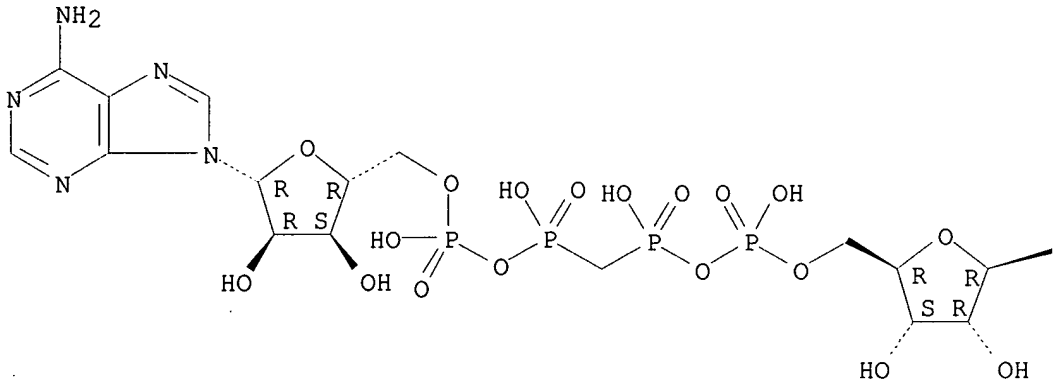
REFERENCE 9: 117:207601

REFERENCE 10: 117:22607

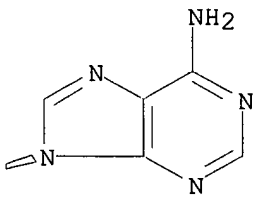
L141 ANSWER 53 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **88109-92-6** REGISTRY
CN 5'-Adenylic acid, 5'.fwdarw.P,5'''.fwdarw.P'-dianhydride with methylenebis[phosphonic acid] (9CI) (CA INDEX NAME)
OTHER NAMES:
CN AppCH2ppA
FS STEREOSEARCH
MF C21 H30 N10 O18 P4
CI COM
LC STN Files: CA, CAPLUS, CASREACT, TOXCENTER, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

28 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
28 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 137:17106

REFERENCE 2: 136:382129

REFERENCE 3: 136:151393

REFERENCE 4: 133:134263

REFERENCE 5: 130:52684

REFERENCE 6: 129:175919

REFERENCE 7: 127:95515

REFERENCE 8: 125:215341

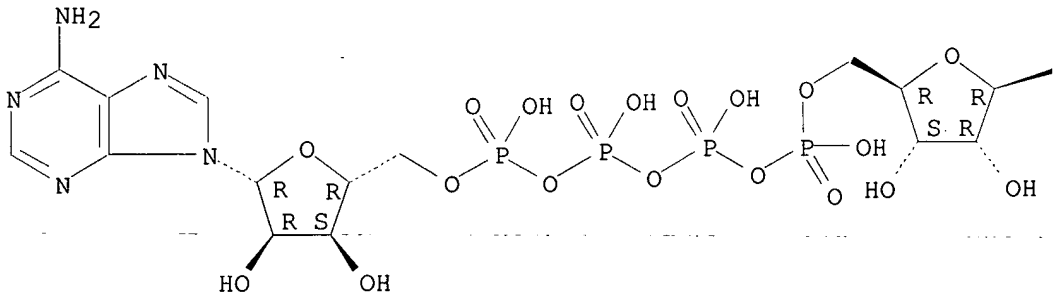
REFERENCE 9: 125:136013

REFERENCE 10: 119:46107

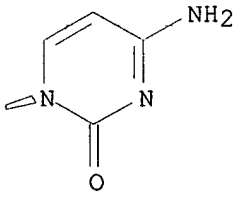
L141 ANSWER 54 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **83008-69-9** REGISTRY
CN Adenosine 5'-(pentahydrogen tetraphosphate), P'''.fwdarw.5'-ester with cytidine (9CI) (CA INDEX NAME)
FS STEREOSEARCH
DR 148503-81-5, 100849-66-9
MF C19 H28 N8 O20 P4
LC STN Files: CA, CAPLUS, MEDLINE, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

19 REFERENCES IN FILE CA (1967 TO DATE)
19 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:365598

REFERENCE 2: 136:151393

REFERENCE 3: 135:298823

REFERENCE 4: 132:264218

REFERENCE 5: 129:287192

REFERENCE 6: 129:175919

REFERENCE 7: 129:132936

REFERENCE 8: 125:215341

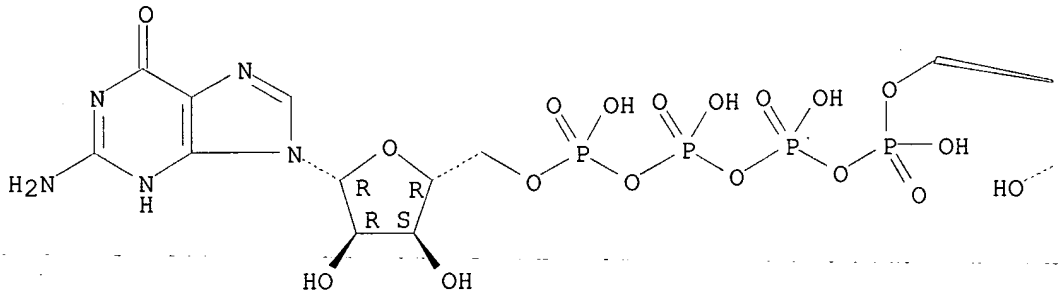
REFERENCE 9: 120:8922

REFERENCE 10: 119:49812

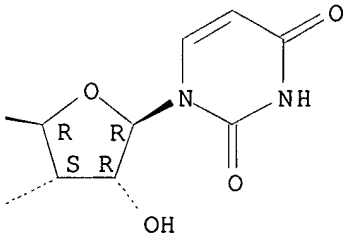
L141 ANSWER 55 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **79695-25-3** REGISTRY
CN Guanosine 5'-(pentahydrogen tetraphosphate), P'''.fwdarw.5'-ester with uridine (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C19 H27 N7 O22 P4
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

8 REFERENCES IN FILE CA (1967 TO DATE)
8 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

REFERENCE 2: 129:175919

REFERENCE 3: 114:222478

REFERENCE 4: 107:232748

REFERENCE 5: 107:54628

REFERENCE 6: 101:19603

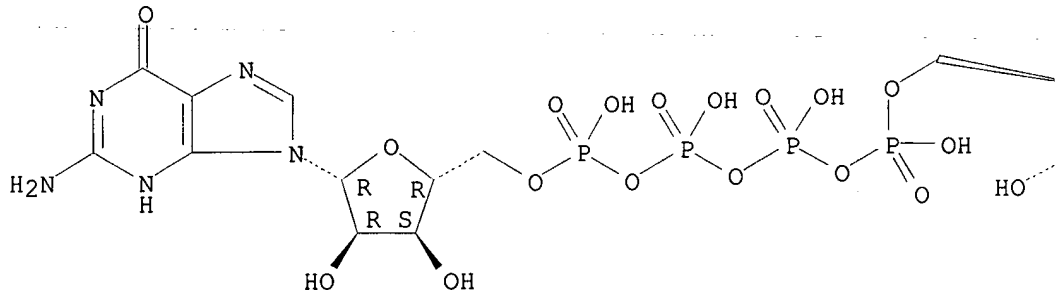
REFERENCE 7: 96:47681

REFERENCE 8: 95:182545

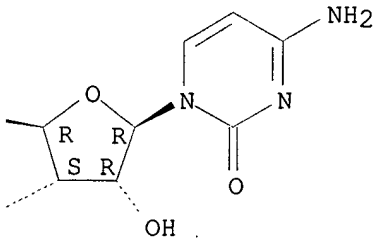
L141 ANSWER 56 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **79695-24-2** REGISTRY
CN Guanosine 5'-(pentahydrogen tetraphosphate), P'''.fwdarw.5'-ester with cytidine (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C19 H28 N8 O21 P4
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

7 REFERENCES IN FILE CA (1967 TO DATE)
7 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

REFERENCE 2: 129:175919

REFERENCE 3: 107:232748

REFERENCE 4: 107:54628

REFERENCE 5: 101:19603

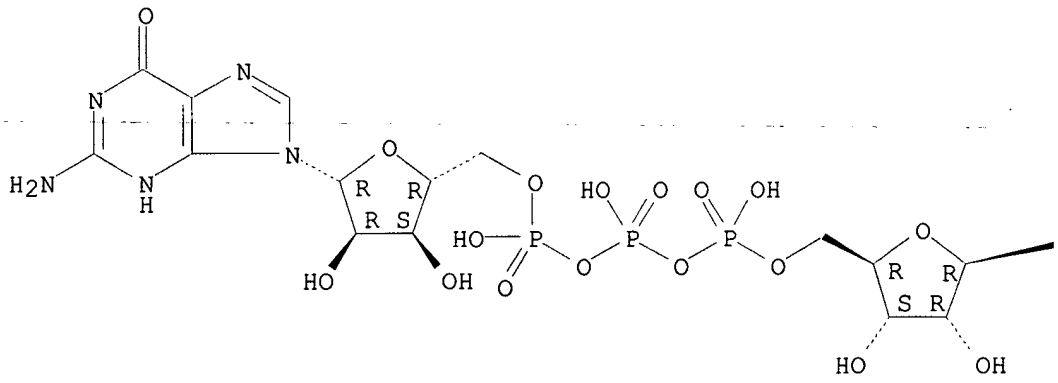
REFERENCE 6: 96:47681

REFERENCE 7: 95:182545

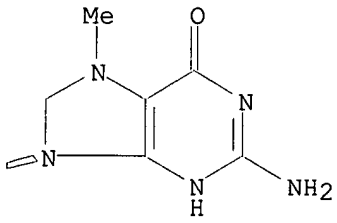
L141 ANSWER 57 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **61340-12-3** REGISTRY
CN Guanosine 5'-(tetrahydrogen triphosphate), 7,8-dihydro-7-methyl-, P''.fwdarw.5'-ester with guanosine (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C21 H31 N10 O18 P3
LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5 REFERENCES IN FILE CA (1967 TO DATE)
5 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

REFERENCE 2: 134:37905

REFERENCE 3: 133:318884

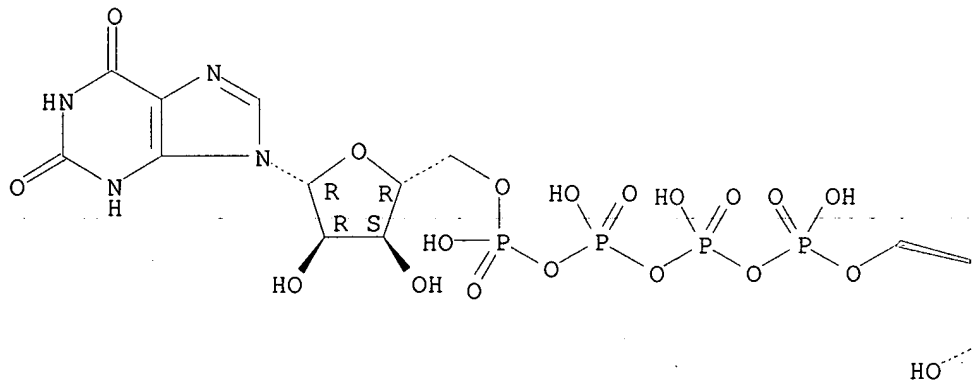
REFERENCE 4: 129:175919

REFERENCE 5: 86:43958

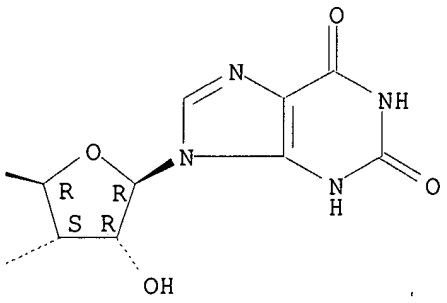
L141 ANSWER 58 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **59985-20-5** REGISTRY
CN Xanthosine 5'-(pentahydrogen tetraphosphate), P'''.fwdarw.5'-ester with xanthosine (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C20 H26 N8 O23 P4
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5 REFERENCES IN FILE CA (1967 TO DATE)
5 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

REFERENCE 2: 131:70274

REFERENCE 3: 129:175919

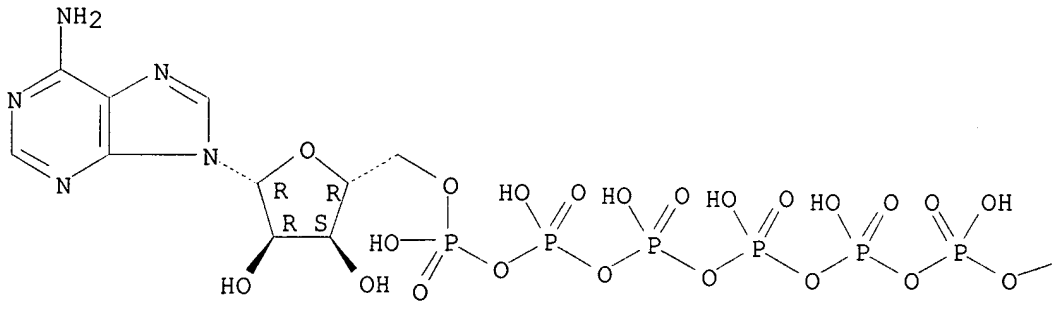
REFERENCE 4: 97:122648

REFERENCE 5: 85:42852

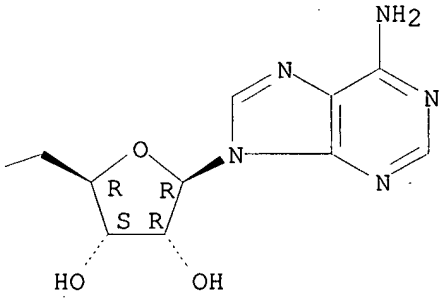
L141 ANSWER 59 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **56983-23-4** REGISTRY
CN Adenosine 5'-(heptahydrogen hexaphosphate), P'''''.fwdarw.5'-ester with adenosine (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Adenosine 5'-hexaphosphate, 5'-ester with adenosine (7CI)
OTHER NAMES:
CN Adenosine-(5')-hexaphospho-(5')-adenosine
CN AppppppA
CN Diadenosine hexaphosphate
FS STEREOSEARCH
DR 123396-55-4, 136105-87-8, 199995-64-7
MF C20 H30 N10 O25 P6
CI COM
LC STN Files: AGRICOLA, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, EMBASE, MEDLINE, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

117 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
117 REFERENCES IN FILE CAPLUS (1967 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 136:319650

REFERENCE 2: 136:291146

REFERENCE 3: 136:257619

REFERENCE 4: 136:151393

REFERENCE 5: 136:144657

REFERENCE 6: 136:113039

REFERENCE 7: 136:968

REFERENCE 8: 135:236901

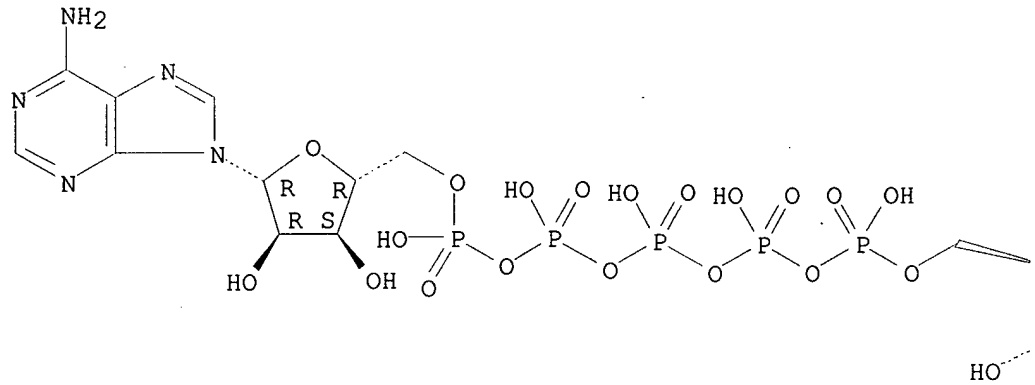
REFERENCE 9: 135:209315

REFERENCE 10: 135:192374

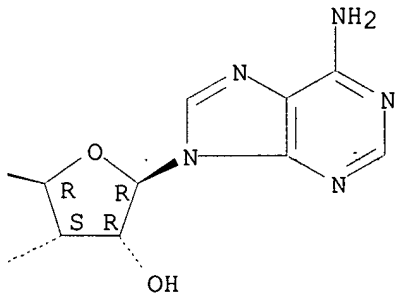
L141 ANSWER 60 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **41708-91-2** REGISTRY
CN Adenosine 5'-(hexahydrogen pentaphosphate), P''''.fwdarw.5'-ester with adenosine (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Adenosine 5'-pentaphosphate, 5'-5'-ester with adenosine (7CI)
OTHER NAMES:
CN Adenosine-(5')-pentaphospho-(5')-adenosine
CN AppppA
CN Di(adenosine-5')pentaphosphate
CN Diadenosine pentaphosphate
CN P1,P5-Bis-(5'-adenosyl)pentaphosphate
CN P1,P5-Di(adenosine-5')pentaphosphate
CN P1,P5-Diadenosine pentaphosphate
FS STEREOSEARCH
DR 128113-55-3, 117137-56-1, 199995-62-5
MF C20 H29 N10 O22 P5
CI COM
LC STN Files: AGRICOLA, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CSCHEM, EMBASE, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

292 REFERENCES IN FILE CA (1967 TO DATE)
14 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
293 REFERENCES IN FILE CAPLUS (1967 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 136:319650

REFERENCE 2: 136:291146

REFERENCE 3: 136:275130

REFERENCE 4: 136:257619

REFERENCE 5: 136:227153

REFERENCE 6: 136:151393

REFERENCE 7: 136:144657

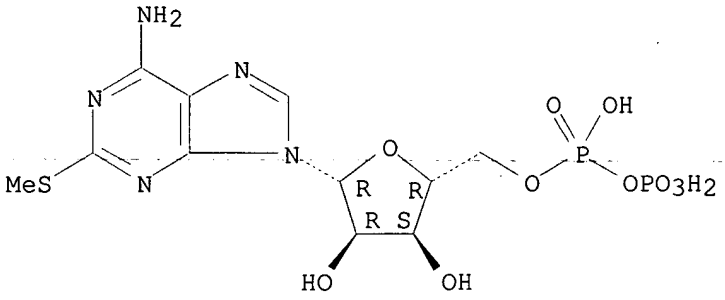
REFERENCE 8: 136:114723

REFERENCE 9: 136:113039

REFERENCE 10: 136:112435

L141 ANSWER 61 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **34983-48-7** REGISTRY
CN Adenosine 5'-(trihydrogen diphosphate), 2-(methylthio)- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2-(Methylthio)adenosine 5'-diphosphate
CN 2-Methylthio-ADP
FS STEREOSEARCH
DR 41036-37-7
MF C11 H17 N5 O10 P2 S
LC STN Files: BIOSIS, CA, CAPLUS, CASREACT, CHEMCATS, MEDLINE, TOXCENTER, USPATFULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

77 REFERENCES IN FILE CA (1967 TO DATE)
77 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 137:28390

REFERENCE 2: 136:380497

REFERENCE 3: 136:363807

REFERENCE 4: 136:350567

REFERENCE 5: 136:304342

REFERENCE 6: 136:129201

REFERENCE 7: 136:112610

REFERENCE 8: 136:48564

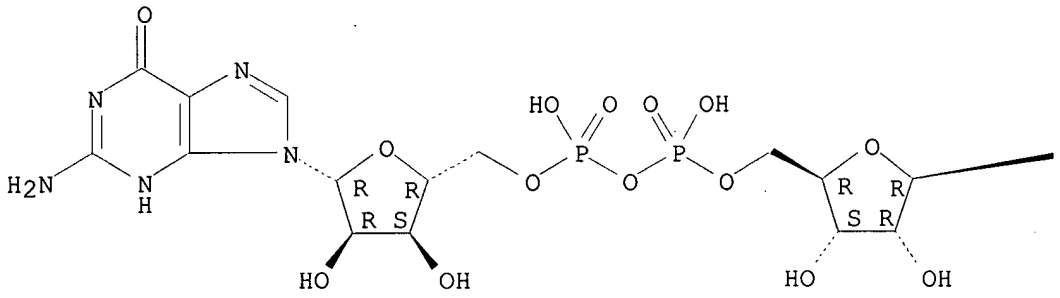
REFERENCE 9: 136:15546

REFERENCE 10: 136:15521

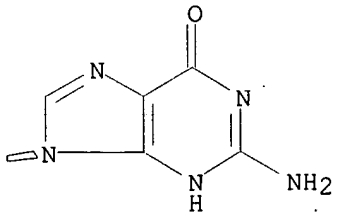
L141 ANSWER 62 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **34692-44-9** REGISTRY
CN Guanosine 5'-(trihydrogen diphosphate), P'.fwdarw.5'-ester with guanosine (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Guanosine 5'-(trihydrogen pyrophosphate), 5'.fwdarw.5'-ester with guanosine (8CI)
OTHER NAMES:
CN Diguanosine 5',5'''-diphosphate
FS STEREOSEARCH
MF C20 H26 N10 O15 P2
CI COM
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

29 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
29 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

REFERENCE 2: 136:144657

REFERENCE 3: 136:65956

REFERENCE 4: 135:253549

REFERENCE 5: 135:3938

REFERENCE 6: 132:50203

REFERENCE 7: 129:175919

REFERENCE 8: 129:149163

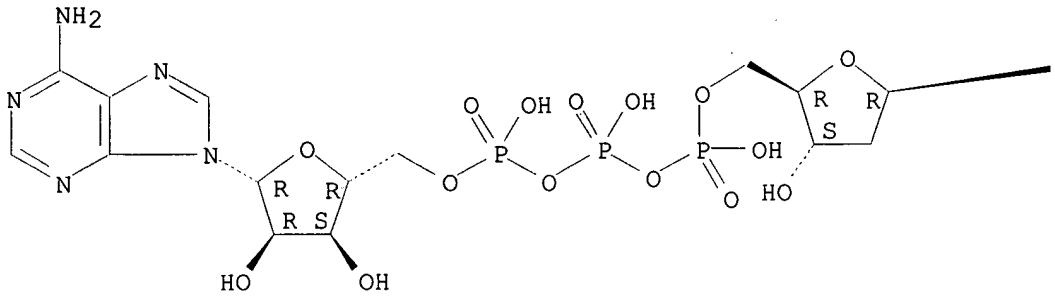
REFERENCE 9: 127:190963

REFERENCE 10: 125:196204

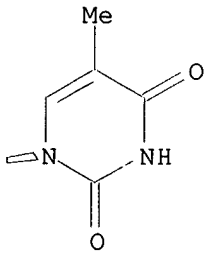
L141 ANSWER 63 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **30632-08-7** REGISTRY
CN Adenosine 5'-(tetrahydrogen triphosphate), P''.fwdarw.5'-ester with thymidine (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Adenosine 5'-(tetrahydrogen triphosphate), 5'.fwdarw.5'-ester with thymidine (8CI)
OTHER NAMES:
CN ApppdT
CN P1,P3-(Adenosine-5'-deoxythymidine-5') triphosphate
FS STEREOSEARCH
DR 83028-14-2
MF C20 H28 N7 O17 P3
CI COM
LC STN Files: BEILSTEIN*, CA, CAPLUS, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

8 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
8 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

REFERENCE 2: 129:175919

REFERENCE 3: 109:149968

REFERENCE 4: 109:6867

REFERENCE 5: 108:182674

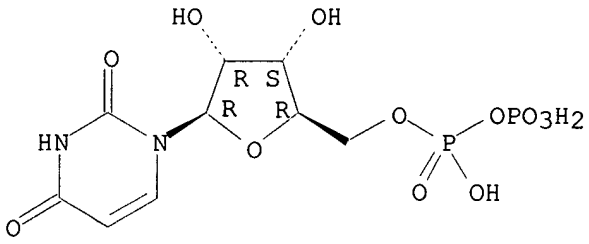
REFERENCE 6: 105:38068

REFERENCE 7: 97:158617

REFERENCE 8: 74:19380

L141 ANSWER 64 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **27821-45-0** REGISTRY
CN Uridine 5'-(trihydrogen diphosphate), disodium salt (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN UDP disodium salt
CN Uridine-5'-diphosphate disodium salt
FS STEREOSEARCH
MF C9 H14 N2 O12 P2 . 2 Na
LC STN Files: CA, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CSCHEM, IFICDB, IFIPAT, IFIUDB, MSDS-OHS, TOXCENTER, USPATFULL
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)
CRN (58-98-0)

Absolute stereochemistry.



●2 Na

18 REFERENCES IN FILE CA (1967 TO DATE)
19 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:705

REFERENCE 2: 135:358114

REFERENCE 3: 134:252575

REFERENCE 4: 130:125350

REFERENCE 5: 117:70247

REFERENCE 6: 106:214302

REFERENCE 7: 89:152782

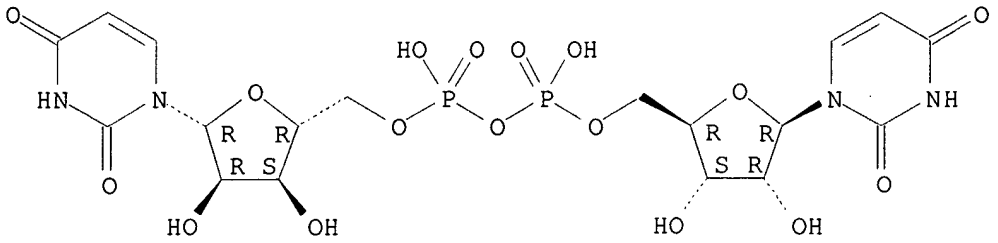
REFERENCE 8: 88:101148

REFERENCE 9: 88:55097

REFERENCE 10: 87:44270

L141 ANSWER 65 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **26184-65-6** REGISTRY
CN Uridine 5'-(trihydrogen diphosphate), P'.fwdarw.5'-ester with uridine (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Uridine 5'-(trihydrogen pyrophosphate), 5'.fwdarw.5'-ester with uridine (8CI)
CN Uridine 5'-pyrophosphate, 5'.fwdarw.5'-ester with uridine (7CI)
CN Uridine pyrophosphate, 5',5'-ester with uridine (6CI)
OTHER NAMES:
CN Uridine diphosphouridine
FS STEREOSEARCH
MF C18 H24 N4 O17 P2
CI COM
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

13 REFERENCES IN FILE CA (1967 TO DATE)
13 REFERENCES IN FILE CAPLUS (1967 TO DATE)
6 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 136:151393

REFERENCE 2: 132:265443

REFERENCE 3: 132:251360

REFERENCE 4: 129:175919

REFERENCE 5: 129:149163

REFERENCE 6: 127:190963

REFERENCE 7: 125:241071

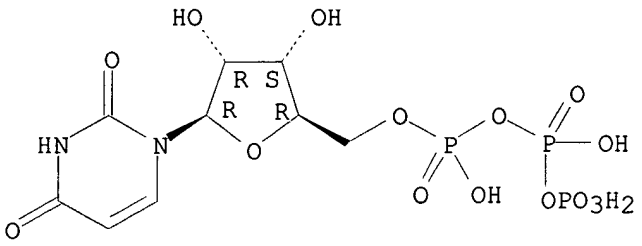
REFERENCE 8: 117:70234

REFERENCE 9: 116:59878

REFERENCE 10: 97:35034

L141 ANSWER 66 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **19817-92-6** REGISTRY
CN Uridine 5'-(tetrahydrogen triphosphate), trisodium salt (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN Trisodium UTP
CN Uridine-5'-triphosphate trisodium salt
CN Utipina
CN UTP trisodium salt
FS STEREOSEARCH
MF C9 H15 N2 O15 P3 . 3 Na
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CSCHEM, MSDS-OHS, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)
CRN (63-39-8)

Absolute stereochemistry.



●3 Na

21 REFERENCES IN FILE CA (1967 TO DATE)
22 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:151393

REFERENCE 2: 136:705

REFERENCE 3: 135:358114

REFERENCE 4: 134:252575

REFERENCE 5: 130:125350

REFERENCE 6: 130:115035

REFERENCE 7: 129:175919

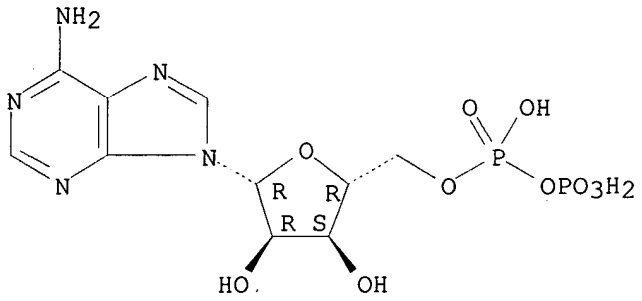
REFERENCE 8: 127:31151

REFERENCE 9: 126:229645

REFERENCE 10: 117:157673

L141 ANSWER 67 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **16178-48-6** REGISTRY
CN Adenosine 5'-(trihydrogen diphosphate), disodium salt (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Adenosine-5'-(trihydrogen pyrophosphate), disodium salt (8CI)
OTHER NAMES:
CN Adenosine-5'-diphosphate disodium salt
CN ADP disodium
CN ADP disodium salt
CN Disodium 5'-ADP
CN Disodium adenosine 5'-diphosphate
CN Disodium ADP
CN Trinosin S
FS STEREOSEARCH
DR 2921-83-7
MF C10 H15 N5 O10 P2 . 2 Na
LC STN Files: AGRICOLA, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CSCHEM, MSDS-OHS, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)
CRN (58-64-0)

Absolute stereochemistry.



●2 Na

43 REFERENCES IN FILE CA (1967 TO DATE)
43 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:705

REFERENCE 2: 133:175213

REFERENCE 3: 132:177247

REFERENCE 4: 132:162719

REFERENCE 5: 123:75462

REFERENCE 6: 120:289156

REFERENCE 7: 119:85054

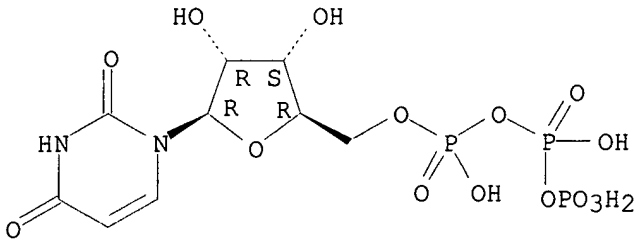
REFERENCE 8: 118:75514

REFERENCE 9: 117:60392

REFERENCE 10: 117:19587

L141 ANSWER 68 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **14264-46-1** REGISTRY
CN Uridine 5'-(tetrahydrogen triphosphate), tetrasodium salt (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN Sodium UTP
CN Uridine triphosphate sodium salt
FS STEREOSEARCH
MF C9 H15 N2 O15 P3 . 4 Na
LC STN Files: BEILSTEIN*, CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, USPATFULL
(*File contains numerically searchable property data)
CRN (63-39-8)

Absolute stereochemistry.



● 4 Na

3 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 132:339428

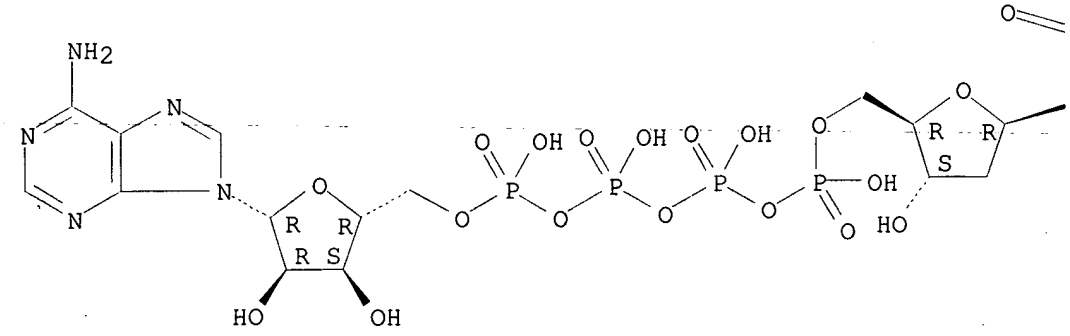
REFERENCE 2: 86:66745

REFERENCE 3: 86:21792

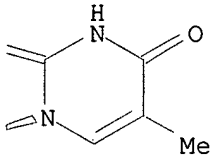
L141 ANSWER 69 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **13457-68-6** REGISTRY
CN Adenosine 5'-(pentahydrogen tetraphosphate), P'''.fwdarw.5'-ester with thymidine (8CI, 9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Adenosine 5'-tetraphosphate, 5'.fwdarw.5'-ester with thymidine (7CI)
OTHER NAMES:
CN P1,P4-(Adenosine-5'-deoxythymidine-5') tetraphosphate
CN Thymidine, 5'-ester with adenosine 5'-tetraphosphate
FS STEREOSEARCH
DR 148503-83-7
MF C20 H29 N7 O20 P4
CI COM
LC STN Files: CA, CANCERLIT, CAOLD, CAPLUS, MEDLINE, TOXCENTER, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

14 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
14 REFERENCES IN FILE CAPLUS (1967 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 136:365598

REFERENCE 2: 136:151393

REFERENCE 3: 132:321022

REFERENCE 4: 129:175919

REFERENCE 5: 129:132936

REFERENCE 6: 125:215341

REFERENCE 7: 120:8922

REFERENCE 8: 119:176516

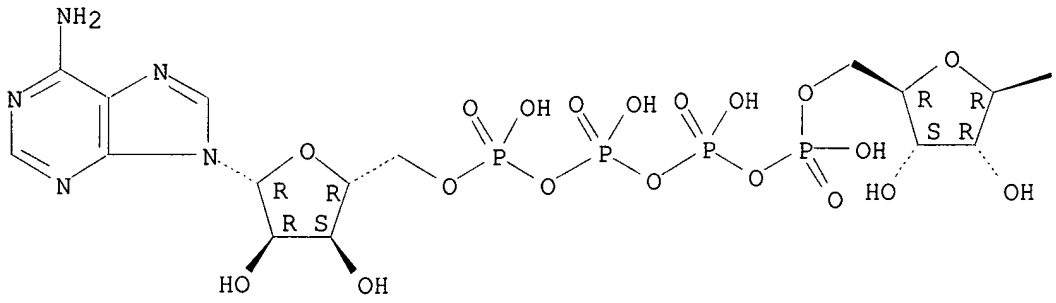
REFERENCE 9: 119:49812

REFERENCE 10: 108:182674

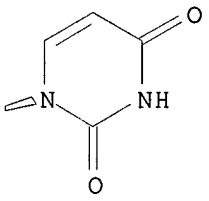
L141 ANSWER 70 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **10527-48-7** REGISTRY
CN Adenosine 5'-(pentahydrogen tetraphosphate), P'''.fwdarw.5'-ester with uridine (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Adenosine 5'-(pentahydrogen tetraphosphate), 5'.fwdarw.5'-ester with uridine (8CI)
CN Adenosine tetraphosphate, 5'.fwdarw.5'-ester with uridine (7CI)
CN Uridine, 5'-ester with adenosine 5'-tetraphosphate (8CI)
OTHER NAMES:
CN P1,P4-(Adenosine-5'-uridine-5') tetraphosphate
FS STEREOSEARCH
DR 148503-80-4, 83008-70-2
MF C19 H27 N7 O21 P4
LC STN Files: CA, CANCERLIT, CAOLD, CAPLUS, MEDLINE, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

22 REFERENCES IN FILE CA (1967 TO DATE)
22 REFERENCES IN FILE CAPLUS (1967 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 136:365598

REFERENCE 2: 136:151393

REFERENCE 3: 135:298823

REFERENCE 4: 132:264217

REFERENCE 5: 129:287192

REFERENCE 6: 129:175919

REFERENCE 7: 129:132936

REFERENCE 8: 125:215341

REFERENCE 9: 120:239424

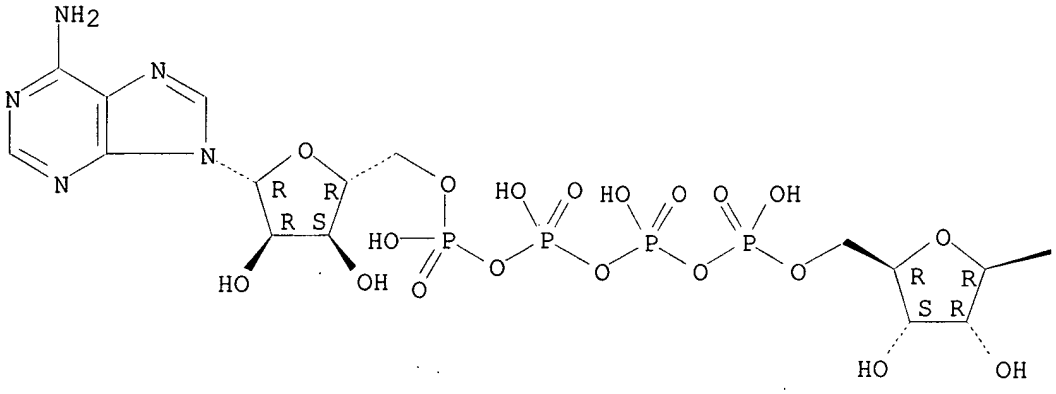
REFERENCE 10: 120:8922

L141 ANSWER 71 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **10527-46-5** REGISTRY
CN Guanosine 5'-(pentahydrogen tetraphosphate), P'''.fwdarw.5'-ester with adenosine (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Guanosine 5'-(pentahydrogen tetraphosphate), 5'.fwdarw.5'-ester with adenosine (8CI)
CN Guanosine 5'-tetraphosphate, 5'-ester with adenosine (7CI)
OTHER NAMES:

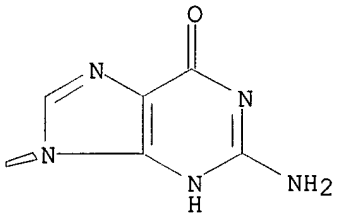
CN P1,P4-(Adenosine-5'-guanosine-5') tetraphosphate
CN P1-(Adenosine-5' P4-guanosine-5') tetraphosphate
FS STEREOSEARCH
DR 148503-78-0
MF C20 H28 N10 O20 P4
CI COM
LC STN Files: CA, CAOLD, CAPLUS, CASREACT, TOXCENTER, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

53 REFERENCES IN FILE CA (1967 TO DATE)
53 REFERENCES IN FILE CAPLUS (1967 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 136:365598

REFERENCE 2: 136:151393

REFERENCE 3: 136:144657

REFERENCE 4: 134:188297

REFERENCE 5: 133:27916

REFERENCE 6: 132:246125

REFERENCE 7: 132:179669

REFERENCE 8: 132:179662

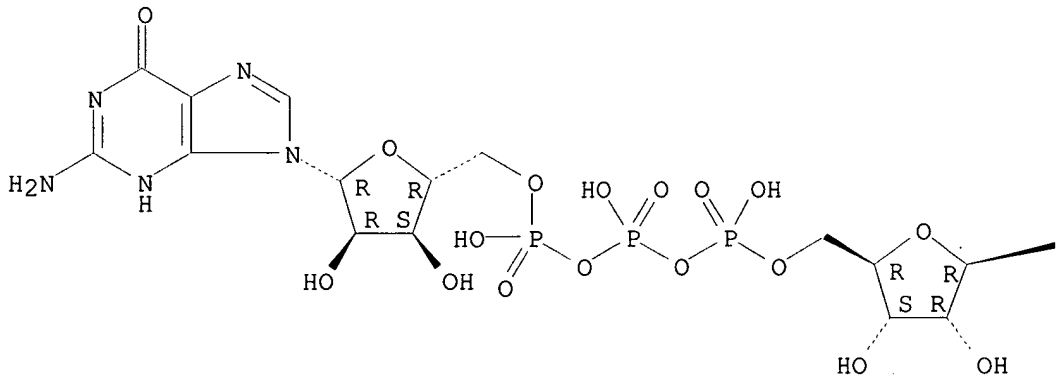
REFERENCE 9: 131:256400

REFERENCE 10: 131:70274

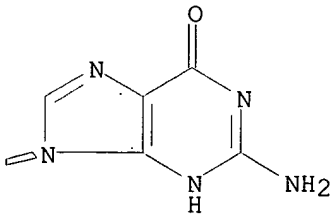
L141 ANSWER 72 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **6674-45-9** REGISTRY
CN Guanosine 5'-(tetrahydrogen triphosphate), P''.fwdarw.5'-ester with guanosine (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Guanosine 5'-(tetrahydrogen triphosphate), 5'.fwdarw.5'-ester with guanosine (8CI)
CN Guanosine triphosphate, 5'.fwdarw.5'-ester with guanosine (7CI)
CN Guanosine, 5'-ester with guanosine 5'-(tetrahydrogen triphosphate) (8CI)
OTHER NAMES:
CN Diguanosine 5',5'''-triphosphate
CN Diguanosine 5'-triphosphate
CN Diguanosine triphosphate
CN Gp3G
CN P1,P3-Diguanosine 5'-triphosphate
FS STEREOSEARCH
DR 79192-45-3
MF C20 H27 N10 O18 P3
CI COM
LC STN Files: BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CSCHEM, IFICDB, IFIPAT, IFIUDB, MEDLINE, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

67 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
67 REFERENCES IN FILE CAPLUS (1967 TO DATE)
3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 136:151393

REFERENCE 2: 136:144657

REFERENCE 3: 135:269163

REFERENCE 4: 135:253549

REFERENCE 5: 135:73117

REFERENCE 6: 134:350916

REFERENCE 7: 132:218454

REFERENCE 8: 132:75952

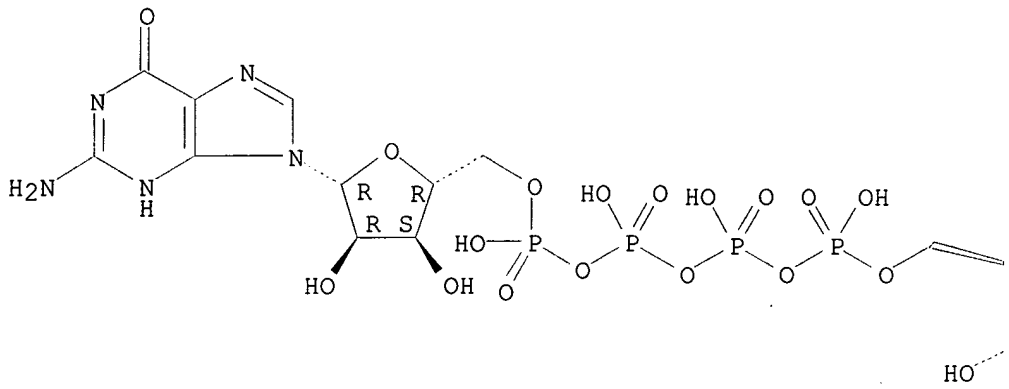
REFERENCE 9: 131:164974

REFERENCE 10: 131:97001

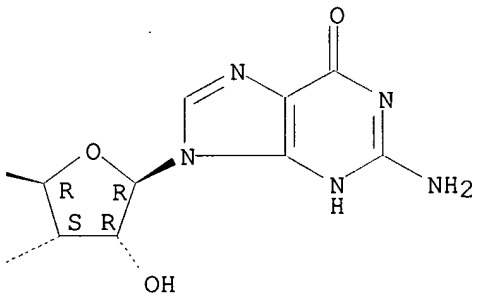
L141 ANSWER 73 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **4130-19-2** REGISTRY
CN Guanosine 5'-(pentahydrogen tetraphosphate), P'''.fwdarw.5'-ester with guanosine (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Guanosine 5'-(pentahydrogen tetraphosphate), 5'.fwdarw.5'-ester with guanosine (8CI)
CN Guanosine 5'-tetraphosphate, 5'-ester with guanosine (7CI)
OTHER NAMES:
CN Diguanosine 5',5'''-tetraphosphate
CN Diguanosine 5'-tetraphosphate
CN P1,P4-Diguanosine 5'-tetraphosphate
FS STEREOSEARCH
DR 79202-52-1
MF C20 H28 N10 O21 P4
CI COM
LC STN Files: BEILSTEIN*, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, EMBASE, MEDLINE, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

82 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
82 REFERENCES IN FILE CAPLUS (1967 TO DATE)
5 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 136:151393

REFERENCE 2: 136:144657

REFERENCE 3: 135:253549

REFERENCE 4: 134:350916

REFERENCE 5: 134:188297

REFERENCE 6: 133:155161

REFERENCE 7: 133:27916

REFERENCE 8: 131:164974

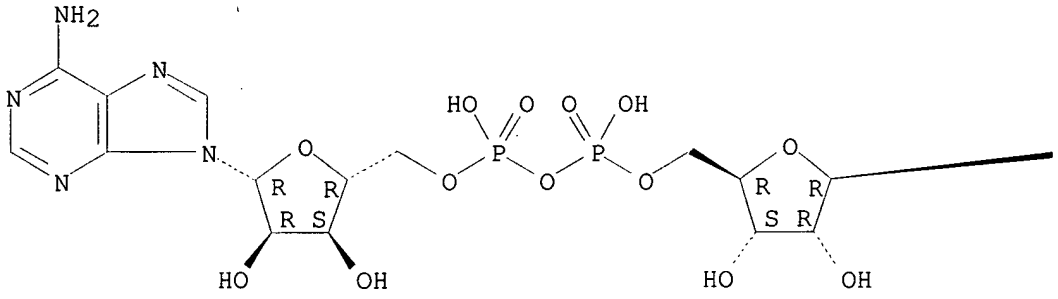
REFERENCE 9: 131:97001

REFERENCE 10: 130:278412

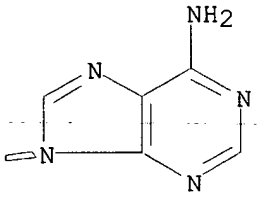
L141 ANSWER 74 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **2596-55-6** REGISTRY
CN Adenosine 5'-(trihydrogen diphosphate), P'.fwdarw.5'-ester with adenosine (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Adenosine 5'-(trihydrogen pyrophosphate), 5'.fwdarw.5'-ester with adenosine (8CI)
CN Adenosine 5'-diphosphate, 5'.fwdarw.5'-ester with adenosine (6CI)
CN Adenosine 5'-pyrophosphate, 5'-ester with adenosine (7CI)
OTHER NAMES:
CN Diadenosine 5',5'-pyrophosphate
CN Diadenosine 5'-pyrophosphate
CN Diadenosine pyrophosphate
CN P1,P2-Di(adenosine-5') diphosphate
FS STEREOSEARCH
DR 63266-82-0, 221169-23-9, 381211-20-7
MF C20 H26 N10 O13 P2
CI COM
LC STN Files: BEILSTEIN*, BIOSIS, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, MEDLINE, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

123 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
123 REFERENCES IN FILE CAPLUS (1967 TO DATE)
18 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:16915

REFERENCE 2: 136:319650

REFERENCE 3: 136:257619

REFERENCE 4: 136:151393

REFERENCE 5: 136:144657

REFERENCE 6: 136:113039

REFERENCE 7: 136:50169

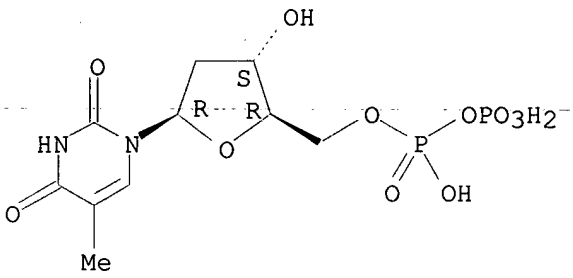
REFERENCE 8: 135:253549

REFERENCE 9: 135:192374

REFERENCE 10: 135:44718

L141 ANSWER 75 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **491-97-4** REGISTRY
CN Thymidine 5'-(trihydrogen diphosphate) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Thymidine 5'-(trihydrogen pyrophosphate) (8CI)
CN Thymidine 5'-pyrophosphate (7CI)
CN Thymidine pyrophosphate (6CI)
OTHER NAMES:
CN 5'-TDP
CN dTDP
CN TDP
CN TDP (nucleotide)
CN Thymidine 5'-diphosphate
CN Thymidine diphosphate
CN Thymidine, mono(trihydrogen diphosphate) (ester)
FS STEREOSEARCH
MF C10 H16 N2 O11 P2
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CIN, CSCHEM, DDFU, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, MEDLINE, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

281 REFERENCES IN FILE CA (1967 TO DATE)
12 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
282 REFERENCES IN FILE CAPLUS (1967 TO DATE)

35 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 136:382185

REFERENCE 2: 136:259178

REFERENCE 3: 136:228721

REFERENCE 4: 136:114711

REFERENCE 5: 136:84678

REFERENCE 6: 136:50169

REFERENCE 7: 136:36563

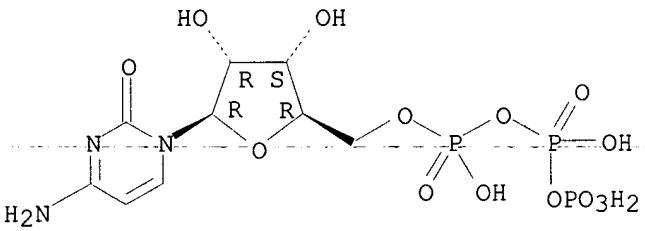
REFERENCE 8: 135:328754

REFERENCE 9: 135:314428

REFERENCE 10: 135:303873

L141 ANSWER 76 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **65-47-4** REGISTRY
CN Cytidine 5'-(tetrahydrogen triphosphate) (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 5'-CTP
CN CTP
CN Cytidine 5'-triphosphate
CN Cytidine triphosphate
CN Cytidine, mono(tetrahydrogen triphosphate) (ester)
FS STEREOSEARCH
MF C9 H16 N3 O14 P3
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CSCHEM, DDFU, DRUGU, EMBASE, IPA, MEDLINE, RTECS*, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2537 REFERENCES IN FILE CA (1967 TO DATE)
56 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
2542 REFERENCES IN FILE CAPLUS (1967 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:16961

REFERENCE 2: 137:2403

REFERENCE 3: 136:397775

REFERENCE 4: 136:382049

REFERENCE 5: 136:365598

REFERENCE 6: 136:352311

REFERENCE 7: 136:351991

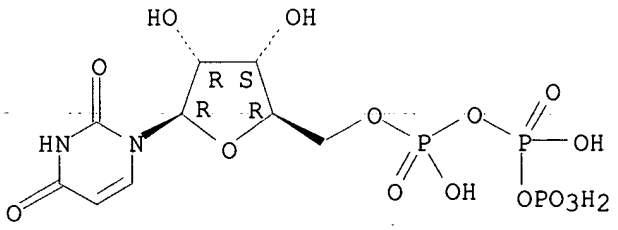
REFERENCE 8: 136:350567

REFERENCE 9: 136:336939

REFERENCE 10: 136:290862

L141 ANSWER 77 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **63-39-8** REGISTRY
CN Uridine 5'-(tetrahydrogen triphosphate) (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 5'-UTP
CN Uridine 5'-triphosphate
CN Uridine triphosphate
CN Uridine, mono(tetrahydrogen triphosphate) (ester)
CN Uteplex
CN UTP
FS STEREOSEARCH
MF C9 H15 N2 O15 P3
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CEN, CHEMLIST, CIN, CSCHEM, DDFU, DRUGNL, DRUGU, DRUGUPDATES, EMBASE, GMELIN*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, NIOSHTIC, PROMT, RTECS*, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3572 REFERENCES IN FILE CA (1967 TO DATE)
75 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3576 REFERENCES IN FILE CAPLUS (1967 TO DATE)
9 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:29993

REFERENCE 2: 137:28493

REFERENCE 3: 137:17751

REFERENCE 4: 137:17586

REFERENCE 5: 137:17316

REFERENCE 6: 137:16961

REFERENCE 7: 137:16011

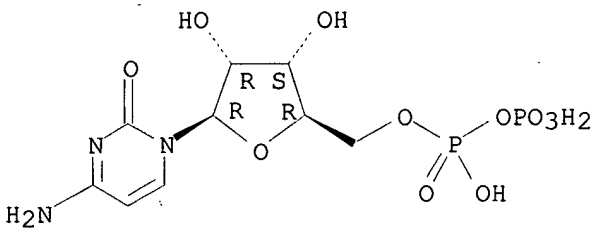
REFERENCE 8: 137:5048

REFERENCE 9: 137:4461

REFERENCE 10: 137:880

L141 ANSWER 78 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **63-38-7** REGISTRY
CN Cytidine 5'-(trihydrogen diphosphate) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Cytidine 5'-(trihydrogen pyrophosphate) (8CI)
CN Cytidine pyrophosphate (6CI)
OTHER NAMES:
CN 5'-CDP
CN CDP
CN Cytidine 5'-diphosphate
CN Cytidine 5'-pyrophosphate
CN Cytidine coenzyme
CN Cytidine diphosphate
CN Cytidine, mono(trihydrogen diphosphate) (ester)
FS STEREOSEARCH
DR 87691-21-2
MF C9 H15 N3 O11 P2
CI COM
LC STN Files: AGRICOLA, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMLIST, CSCHEM, DDFU, DRUGU, EMBASE, GMELIN*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MSDS-OHS, RTECS*, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

964 REFERENCES IN FILE CA (1967 TO DATE)
145 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
964 REFERENCES IN FILE CAPLUS (1967 TO DATE)
67 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 136:382185

REFERENCE 2: 136:365598

REFERENCE 3: 136:350567

REFERENCE 4: 136:213828

REFERENCE 5: 136:212678

REFERENCE 6: 136:84678

REFERENCE 7: 136:50169

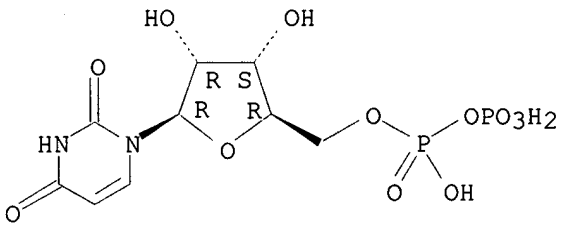
REFERENCE 8: 136:36563

REFERENCE 9: 136:17167

REFERENCE 10: 136:4799

L141 ANSWER 79 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **58-98-0** REGISTRY
CN Uridine 5'-(trihydrogen diphosphate) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Uridine 5'-(trihydrogen pyrophosphate) (8CI)
CN Uridine diphosphate (6CI)
CN Uridine pyrophosphate (7CI)
OTHER NAMES:
CN 5'-UDP
CN UDP
CN Uridine 5'-diphosphate
CN Uridine 5'-pyrophosphate
CN Uridine 5'-pyrophosphoric acid
CN Uridine, 5'-(trihydrogen diphosphate)
FS STEREOSEARCH
DR 489-66-7, 141342-82-7, 88756-92-7
MF C9 H14 N2 O12 P2
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CEN, CHEMLIST, CSCHEM, DDFU, DRUGU, EMBASE, GMELIN*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MRCK*, NAPRALERT, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1483 REFERENCES IN FILE CA (1967 TO DATE)
98 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1485 REFERENCES IN FILE CAPLUS (1967 TO DATE)
4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:29993

REFERENCE 2: 137:17586

REFERENCE 3: 137:17316

REFERENCE 4: 137:5048

REFERENCE 5: 137:880

REFERENCE 6: 137:400

REFERENCE 7: 136:382185

REFERENCE 8: 136:380468

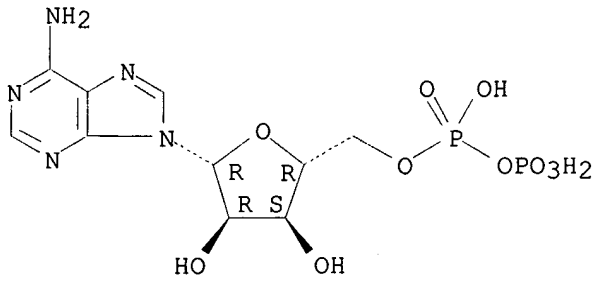
REFERENCE 9: 136:364761

REFERENCE 10: 136:350567

L141 ANSWER 80 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **58-64-0** REGISTRY
CN Adenosine 5'-(trihydrogen diphosphate) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Adenosine 5'-(trihydrogen pyrophosphate) (8CI)
CN Adenosine diphosphate (6CI)
OTHER NAMES:
CN .alpha.-ADP
CN 5'-ADP
CN Adenosine 5'-diphosphate
CN Adenosine 5'-diphosphoric acid
CN Adenosine 5'-pyrophosphate
CN Adenosine 5'-pyrophosphoric acid
CN Adenosine pyrophosphate
CN Adenosine, 5'-(trihydrogen diphosphate)
CN ADP
CN ADP (nucleotide)
FS STEREOSEARCH
DR 84412-16-8
MF C10 H15 N5 O10 P2
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DETHERM*, DRUGU, EMBASE, GMELIN*, IFICDB,

IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, NIOSHTIC, PIRA, PROMT, RTECS*, TOXCENTER, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

20334 REFERENCES IN FILE CA (1967 TO DATE)
465 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
20356 REFERENCES IN FILE CAPLUS (1967 TO DATE)
22 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:37738

REFERENCE 2: 137:32213

REFERENCE 3: 137:32110

REFERENCE 4: 137:31996

REFERENCE 5: 137:29818

REFERENCE 6: 137:29801

REFERENCE 7: 137:29764

REFERENCE 8: 137:29618

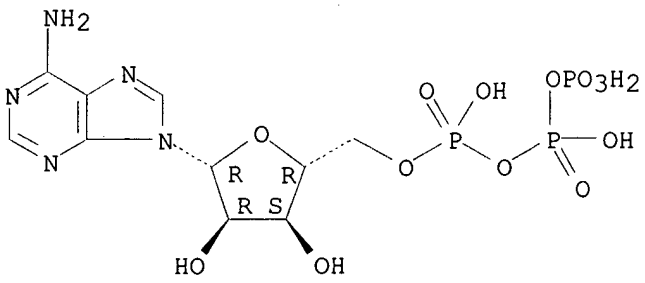
REFERENCE 9: 137:28528

REFERENCE 10: 137:27969

L141 ANSWER 81 OF 81 REGISTRY COPYRIGHT 2002 ACS
RN **56-65-5** REGISTRY
CN Adenosine 5'-(tetrahydrogen triphosphate) (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 5'-ATP
CN Adenosine 5'-triphosphate
CN Adenosine 5'-triphosphoric acid
CN Adenosine triphosphate
CN Adenosine, 5'-(tetrahydrogen triphosphate)
CN Adenylpyrophosphoric acid
CN Adephos
CN Adetol
CN Adynol
CN Atipi
CN ATP

CN ATP (nucleotide)
CN Atriphos
CN Cardenosine
CN Fosfobion
CN Glucobasin
CN Myotriphos
CN Phosphobion
CN Striadyne
CN Triadenyl
CN Triphosphaden
CN Triphosphoric acid adenosine ester
FS STEREOSEARCH
DR 10168-83-9, 16488-07-6, 51569-41-6, 71800-44-7, 84412-18-0
MF C10 H16 N5 O13 P3
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DETHERM*, DRUGNL, DRUGU, DRUGUPDATES, EMBASE, GMELIN*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, NAPRALERT, NIOSHTIC, PHAR, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, TULSA, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

60191 REFERENCES IN FILE CA (1967 TO DATE)
1109 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
60244 REFERENCES IN FILE CAPLUS (1967 TO DATE)
19 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:37738

REFERENCE 2: 137:32580

REFERENCE 3: 137:32490

REFERENCE 4: 137:32213

REFERENCE 5: 137:32110

REFERENCE 6: 137:32036

REFERENCE 7: 137:31996

REFERENCE 8: 137:31532

REFERENCE 9: 137:31297

REFERENCE 10: 137:31026

=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 13:11:29 ON 16 JUL 2002

FILE COVERS 1907 - 16 Jul 2002 VOL 137 ISS 3
FILE LAST UPDATED: 15 Jul 2002 (20020715/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> d bib abs hitrn retable tot l130

L130 ANSWER 1 OF 31 HCAPLUS COPYRIGHT 2002 ACS
AN 2002:332677 HCAPLUS
DN 136:350567
TI Method of treating gastrointestinal tract disease with purinergic P2Y receptor agonists
IN Yerxa, Benjamin R.; Rideout, Janet L.; Pendergast, William; Shaver, Sammy R.; Zhang, Zhen; **Peterson, Ward M.**; Cowlen, Matthew
PA USA
SO U.S. Pat. Appl. Publ., 29 pp., Cont.-in-part of U. S. Ser. No. 512,867.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002052336	A1	20020502	US 2000-747777	20001222
	US 6331529	B1	20011218	US 2000-512867	20000225
	US 2002052338	A1	20020502	US 2001-5267	20011203
PRAI	US 1999-121754P	P	19990226		
	US 1999-171710P	P	19991222		
	US 2000-512867	A2	20000225		

OS MARPAT 136:350567
AB The invention provides a method of regulating water and mucin secretions and fluid transport in the gastrointestinal tract. The invention also provides a method for treating a gastrointestinal disease in which the mucosal barrier of the gastrointestinal system is impaired. The invention addnl. provides a method for correcting disorders of fluid secretion or absorption in the gastrointestinal system. The method comprises

administering to a patient a pharmaceutical compn. comprising a purinergic P2Y receptor agonist, in an amt. effective to regulate water and mucin secretions or to correct abnormal fluid transport in the gastrointestinal tract. The pharmaceutical compn. used in this invention comprises a P2Y purinergic receptor agonist such as UDP, UTP, CDP, CTP, ADP, ATP, and their analogs, as well as dinucleotide polyphosphate compds. The compd. is prepd. in an oral form, an injectable form, or a suppository form, and administered to a patient.

IT **34983-48-7**, 2-MethylthioADP
RL: PAC (Pharmacological activity); BIOL (Biological study)
(purinergic P2Y agonist for treatment of gastrointestinal disease)

IT **56-65-5**, Adenosine triphosphate, biological studies **58-64-0**, ADP, biological studies **58-98-0**, UDP, biological studies **63-38-7**, CDP **63-39-8**, UTP **65-47-4**, CTP **5542-28-9 5959-90-0 30632-06-5 59985-21-6 63785-59-1 81534-69-2 111648-11-4 211448-70-3 211448-78-1 211448-85-0 345950-34-7**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(purinergic P2Y agonist for treatment of gastrointestinal disease)

L130 ANSWER 2 OF 31 HCAPLUS COPYRIGHT 2002 ACS
AN 2002:256037 HCAPLUS
DN 136:273216
TI Catecholamine adrenergic pharmaceutical compositions
IN Root-Bernstein, Robert S.; Dillon, Patrick F.
PA Board of Trustees Operating Michigan State University, USA
SO PCT Int. Appl., 40 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002026223	A2	20020404	WO 2001-US30272	20010927

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI US 2000-236751P P 20000929

AB Pharmaceutical compns. comprise (a) a safe and effective amt. of an adrenergic compd.; and (b) a complement to said adrenergic compd., selected from the group consisting of a hyperpreserving amt. of an ascorbate, a safe and effective amt. of an opioid, a hyperpreserving amt. of a polycarboxylic acid chelator, a safe and effective amt. of D-ribose and adenosine derivs., and mixt. thereof. Methods are also provided for regulating an adrenergic receptor in a human or other animal, comprising the administration of: (c) a low dose of an adrenergic compd.; and (d) a safe and effective amt. of a complement to said adrenergic compd. Preferably, the adrenergic compd. is a catecholamine. Preferred complements include ascorbates, particularly ascorbic acid. Methods include the treatment of neurol. disorders, hypotension, forward failure, backward failure, congestive heart failure, shock, hypertension, hemorrhage, disorders assocd. with anesthesia, chronic obstructive pulmonary disease, asthma, colic, Crohn's disease, anaphylaxis, interstitial cystitis, overactive bladder syndrome, premature labor, myasthenia gravis, and **glaucoma**. Asthmatic patients were

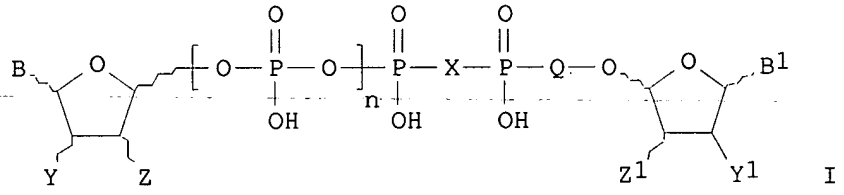
administered an aerosol comprising 0.075% isoproterenol and 1.0% ascorbic acid. Systemic uptake of isoproterenol was decreased, thereby eliminating the adverse side effects previously experienced.

IT **56-65-5**, Atp, biological studies
RL: MOA (Modifier or additive use); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(catecholamine adrenergic pharmaceutical compns.)

L130 ANSWER 3 OF 31 HCAPLUS COPYRIGHT 2002 ACS
AN 2002:136070 HCAPLUS
DN 136:151393
TI Preparation of dinucleotides and their use as modulators of mucociliary clearance and ciliary beat frequency
IN Pendergast, William; Yerxa, Benjamin R.; Rideout, Janet L.; Siddiqi, Suhaib M.
PA Inspire Pharmaceuticals, Inc., USA
SO U.S., 15 pp., Cont.-in-part of U.S. 5,900,407.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6348589	B1	20020219	US 1998-101395	19980710
	US 5900407	A	19990504	US 1997-797472	19970206
	US 5837861	A	19981117	US 1997-798508	19970210
	WO 9834942	A2	19980813	WO 1998-US2702	19980206
	WO 9834942	A3	20000106		
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	US 2002082417	A1	20020627	US 2001-7451	20011106
PRAI	US 1997-797472	A2	19970206		
	US 1997-798508	A2	19970210		
	WO 1998-US2702	W	19980206		
	US 1998-101395	A1	19980710		

OS MARPAT 136:151393
GI



I

AB The present invention relates to certain novel dinucleotides I (X = O, CH2, imido, CF2; B, B1 = independently nucleobase; Z, Z1 = independently OH, N3; Y, Y1 = independently H, OH; Q = (HPO3)m; n = 0-2; m = 0-2; n + m = 0-4) and formulations thereof which are highly selective agonists of the P2Y2 and/or P2Y4 purinergic receptor. They are useful in the treatment of chronic obstructive pulmonary diseases such as chronic bronchitis, PCD, cystic fibrosis, as well as prevention of pneumonia due to immobility. Furthermore, because of their general ability to clear retained mucus

secretions and stimulate ciliary beat frequency, the compds. of the present invention are also useful in the treatment of sinusitis, otitis media and nasolacrimal duct obstruction. They are also useful for treatment of dry eye disease and **retinal detachment**.
Thus, P1,P2-di(uridine-5'-)-P2,P3-methylenetetraphosphate was prepd. as P2Y2 and/or P2Y4 purinergic receptor (EC50 = 11.1 .mu.mol).

IT **2596-55-6P 4130-19-2P 5542-28-9P**
5959-90-0P 6674-45-9P 10527-46-5P
10527-48-7P 13457-68-6P 26184-65-6P
30632-08-7P 34692-44-9P 41708-91-2P
56983-23-4P 59985-20-5P 59985-21-6P
61340-12-3P 63785-59-1P 79695-24-2P
79695-25-3P 83008-69-9P 88109-92-6P
96920-51-3P 97776-54-0P 97776-55-1P
103137-88-8P 103137-89-9P 111035-55-3P
111648-11-4P 134311-47-0P 135780-83-5P
135780-85-7P 135780-92-6P 135802-64-1P
154960-70-0P 170638-56-9P 170638-57-0P
170638-58-1P 170638-59-2P 170638-60-5P
170638-61-6P 170638-62-7P 211427-06-4P
211427-09-7P 211427-11-1P 211448-67-8P
211448-72-5P 211448-73-6P 211448-74-7P
211448-76-9P 211448-77-0P 211448-78-1P
211448-79-2P 211448-80-5P 211448-81-6P
211448-88-3P
RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of dinucleotides and their use as modulators of mucociliary clearance and ciliary beat frequency)

IT **63-39-8**, Uridine 5'-triphosphate **19817-92-6**
211448-71-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of dinucleotides and their use as modulators of mucociliary clearance and ciliary beat frequency)

IT **211427-07-5P 211448-70-3P 211448-75-8P**
211448-82-7P 211448-83-8P 211448-84-9P
211448-85-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of dinucleotides and their use as modulators of mucociliary clearance and ciliary beat frequency)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Anon	1996			WO 9602554	HCAPLUS
Anon	1996			WO 9602554 A	HCAPLUS
Anon	1996			WO 9640059 A	HCAPLUS
Anon	1996			WO 9640059	HCAPLUS
Anon	1998			WO 9803177 A	HCAPLUS
Anon	1998			WO 9803182 A	HCAPLUS
Anon	1998			WO 9815563	HCAPLUS
Baker, J	1988	208	87	Mutation Res	HCAPLUS
Blackburn, G	1991	10	549	Nucleosides & Nucleo	HCAPLUS
Blackburn, G	1991	10	549	Nucleosides and Nucl	HCAPLUS
Bone, R	1986	261	16410	J Biol Chem	HCAPLUS
Boucher	1994			US 5292498 A	HCAPLUS
Brown, H	1991	40	648	Mol Pharmacol	HCAPLUS
Casillas, T	1993	32	14203	Biochemistry	HCAPLUS
Castro, E	1990	100	360	Br J Pharmacol	HCAPLUS
Castro, E	1992	106	833	Br J Pharmacol	HCAPLUS
Castro, E	1995	270	5098	J Biol Chem	HCAPLUS

Castro, E	1994	426	524	Pflugers Arch	HCAPLUS
Chavan, A	1995	208	390	Biochemical and Biop	HCAPLUS
Coste, H	1987	262	12096	J Biol Chem	HCAPLUS
Devash	1989			US 4855304 A	HCAPLUS
Ding, P	1996	125	435	Chemical Abstracts	
Drutz, D	1996	37	185	Drug Dev Res	
Elmaleh, D	1984	81	918	Proc Natl Acad Sci	HCAPLUS
Gobran, L	1994	267	L625	Am J Physiol	HCAPLUS
Grummt, F	1983	2	41	Plant Mol Bio	HCAPLUS
Guarnowski, A	1995	14	731	Nucleosides and Nucl	
Guranowski, A	1988	27	2959	Biochemistry	HCAPLUS
Hagemeier, E	1982	237	174	Journal of Chromatog	HCAPLUS
Hagemeier, E	1982	237	174	Journal of Chromotog	HCAPLUS
Hata, T	1976		987	Chemistry Letters	HCAPLUS
Hata, T	1976		987	Chemistry Letters	HCAPLUS
Hiderman, R	1991	266	6915	J Biol Chem	
Holler, E	1983	22	4924	Biochemistry	HCAPLUS
Holler, E	1983	22	4924	Biochemistry	HCAPLUS
Huhn, G	1993	28	1959	Separation Science a	
Huhn, G	1993	28	1959	Separation and Scien	
Jacobus	1998			US 5789391 A	HCAPLUS
Kanavarioti, A	1991	32	6065	Tett Lett	HCAPLUS
Kim, B	1992	89	11056	Proc Natl Acad Sci	HCAPLUS
Kimura, T	1995	18	1556	Biol Pharm Bull	HCAPLUS
Klein, G	1988	27	1897	Biochemistry	HCAPLUS
Klein, J	1994	19	823	Clin Infect Dis	MEDLINE
Knowles, M	1991	325	533	N Engl J Med	HCAPLUS
Lazarowski, E	1995	116	1619	Brit J Pharm	HCAPLUS
Lethem, M	1993	9	315	Am J Respir Cell Mol	HCAPLUS
Lobaton, C	1985	50	495	Eur J Biochem	
Lowe, G	1991	10	181	Nucleosides & Nucleo	HCAPLUS
Luthje, J	1988	173	241	Eur J Biochem	MEDLINE
Mason, S	1991	103	1649	Br J Pharmacol	HCAPLUS
McLennan, A	1984	12	1609	Nucleic Acid Res	HCAPLUS
Miras-Portugal, M	1990	603	523	Ann NY Acad Sci	
Morii, H	1992	205	979	Eur J Biochem	HCAPLUS
Moss, A	1985	1986	66	National Center for	
Ng, K	1987	15	3573	Nucleic Acid Res	HCAPLUS
Nuutinen, J	1985	10	47	International Journa	MEDLINE
Olivier, K	1996	154	217	Am J Respr Crit Care	MEDLINE
Ono, K	1982	36	414	Biomedicine	HCAPLUS
Orr, R	1988	37	673	Biochemical Pharmaco	HCAPLUS
Orr, R	1988	37	673	Biochemical Pharmaco	HCAPLUS
Panchenko, V	1996	70	353	Neuroscience	HCAPLUS
Pendergast	1998			US 5837861 A	HCAPLUS
Pintor, J	1995	115	895	Br J Pharmacol	HCAPLUS
Pintor, J	1995	26	229	Gen Pharmac	HCAPLUS
Pintor, J	1995	64	670	J Neurochem	HCAPLUS
Pintor, J	1996		9716	Journal of Biochemis	
Pintor, J	1997	51	277	Molecular Pharmacolo	HCAPLUS
Plateau, P	1985	24	914	Biochemistry	HCAPLUS
Plateau, P	1985	24	914	Biochemistry	HCAPLUS
Rapaport, E	1981	78	838	Proc Natl Acad Sci	HCAPLUS
Rotilan, P	1991	280	371	FEBS	HCAPLUS
Scheffzek, K	1996	35	9716	Biochemistry	HCAPLUS
Schluter, H	1994	367	186	Nature	MEDLINE
Schulze-Lohoff, E	1995	26	899	Hypertension	HCAPLUS
Sillero, M	1977	76	331	Eur J Biochem	HCAPLUS
Silverman, R	1979	43	27	Microbiological Rev	HCAPLUS
Stepinski, J	1995	14	717	Nucleosides & Nucleo	HCAPLUS
Stepinski, J	1995	14	717	Nucleosides & Nucleo	HCAPLUS
Stridh, S	1981	1	97	Antiviral Research	HCAPLUS
Stridh, S	1981	1	97	Antiviral Research	HCAPLUS

Tarusova, N	1989	110		Chemical Abstracts	
Tarusova, N	1989	110		Chemical Abstracts	
Theoclitou, M	1996		2009	Journal of the Chemi	HCAPLUS
Theoclitou, M	1996		2009	Journal of the Chemi	HCAPLUS
Tumanov, Y	1988	109		Chemical Abstracts	
Tumanov, Y	1988	109		Chemical Abstracts	
Vallejo, C	1976	483	304	Biochem Biophy Acta	
Visscher, J	1992	20	5749	Nucleic Acids Res	HCAPLUS
Visscher, J	1992	20	5749	Selective Cleavage o	HCAPLUS
Walker, J	1993	32	14009	Biochemistry	HCAPLUS
Zamecnik, P	1983	134	1	Analytical Biochem	HCAPLUS
Zamecnik, P	1992	89	2370	Proc Natl Acad Sci	HCAPLUS
Zatorski, A	1996	39	2422	Journal of Medicinal	HCAPLUS

L130 ANSWER 4 OF 31 HCAPLUS COPYRIGHT 2002 ACS
AN 2002:107834 HCAPLUS
DN 136:146442
TI Method and composition for the accelerated in vivo removal of ethanol
IN Bowen, Ward Beryl; Daniel, Daniel Salman
PA USA
SO U.S. Pat. Appl. Publ., 10 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2002015741	A1	20020207	US 2001-876322	20010607
PRAI US 2000-210950P	P	20000612		

AB A compn. for accelerating the disposal of ethanol from bodily fluid. Certain additives can accelerate the metabolic oxidn. of ethanol, and others in addn. act as catalysts or "pseudo" enzymes for the oxidn. Additives include the oxidant NAD and a variety of other additives such as transition metal ions and complexes thereof which favor the oxidn. reaction. The compns. described can act as a sobriety inducer and/or as an effective palliative for the unpleasant effects of overuse of ethanol.
IT **56-65-5**, 5'-ATP, biological studies
RL: **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(accelerant; method and compn. for accelerated in vivo removal of ethanol)

L130 ANSWER 5 OF 31 HCAPLUS COPYRIGHT 2002 ACS
AN 2002:10323 HCAPLUS
DN 136:74708
TI Composition and method for the repair and regeneration of cartilage and other tissues based on a polymer gel
IN Hoemann, Caroline D.; Buschmann, Michael D.; Mckee, Marc D.
PA Biosyntech Canada Inc., Can.
SO PCT Int. Appl., 106 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002000272	A2	20020103	WO 2001-CA959	20010629

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,

DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

	AU 2001068882	A5	20020108	AU 2001-68882	20010629
	US 2002082220	A1	20020627	US 2001-896912	20010629
PRAI	US 2000-214717P	P	20000629		
	WO 2001-CA959	W	20010629		

AB The present invention relates to a new method for repairing human or animal tissues such as cartilage, meniscus, ligament, tendon, bone, skin, cornea, periodontal tissues, abscesses, resected tumors, and ulcers. The method comprises the step of introducing into the tissue a temp.-dependent polymer gel compn. such that the compn. adhere to the tissue and promote support for cell proliferation for repairing the tissue. Other than a polymer, the compn. preferably comprises a blood component such as whole blood, processed blood, venous blood, arterial blood, blood from bone, blood from bone-marrow, bone marrow, umbilical cord blood, placenta blood, erythrocytes, leukocytes, monocytes, platelets, fibrinogen, thrombin and platelet rich plasma. The present invention also relates to a new compn. to be used with the method of the present invention. For example, chondral defects with perforations to the subchrondal bone of rabbits were treated with a peripheral blood/chitosan-glyceryl phosphate mixt. that was delivered as a liq., and allowed to solidify in situ. After 5-8 wk healing, the blood/chitosan-treated defects were filled with repair tissue having the appearance of hyaline, a glycosaminoglycan (GAG)-rich cartilage repair tissue, which adhered to the defect surfaces, and filled the deffects. Repair tissue from the untreated defects (control) had the appearance of fibro-cartilage, with particularly no metachromatic staining for GAG, and only partial defect filling.

IT **58-64-0**, Adenosine diphosphate, biological studies
RL: **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(temp.-dependent polymer gel compns. contg. blood components for repair and regeneration of human or animal tissues)

L130 ANSWER 6 OF 31 HCAPLUS COPYRIGHT 2002 ACS
AN 2001:885819 HCAPLUS
DN 136:705
TI Ectocornea extension promoters containing P2Y receptor agonists
IN Nakata, Katsuhiko; Nakamura, Masatsugu; Fujihara, Tsutomu; Fujita, Hiromi
PA Santen Pharmaceutical Co., Ltd., Japan; Inspire Pharmaceuticals, Inc.
SO PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001091795	A1	20011206	WO 2001-JP4520	20010530
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	JP 2002053492	A2	20020219	JP 2001-161664	20010530
PRAI	JP 2000-159889	A	20000530		

OS MARPAT 136:705

AB As the results of searching for compds. having an effect of promoting ectocornea extension in the ophthalmol. field, it is found out that P2Y receptor agonists typified by phosphoric acid compds. having adenosyl, uridyl, xanthosyl, guanosyl or thymidyl and salts thereof exhibit an excellent effect of promoting ectocornea extension. The effect of

P1,P4-di(uridine-5')-tetraphosphate tetrasodium salt (DUTP-Na) on rabbit corneal epithelium elongation was examd. Also, an eye drop contg. DUTP-Na 10, NaCl 90 mg, and water q.s. to 100 mL was formulated.

IT **16178-48-6**, Adenosine 5'-diphosphate disodium salt
19817-92-6, Uridine 5'-triphosphate trisodium salt
27821-45-0, Uridine 5'-diphosphate disodium salt
211427-08-6
RL: PAC (Pharmacological activity); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(P2Y receptor agonists as corneal epithelium elongation promoters)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Cha, S	2000	82	181	Jpn J Pharmacol	HCAPLUS
Inspire Pharmaceuticals				EP 1087777 A2	HCAPLUS
Inspire Pharmaceuticals				US 5900407 A	HCAPLUS
Inspire Pharmaceuticals				EP 981534 A2	HCAPLUS
Inspire Pharmaceuticals				AU 9863242 A1	HCAPLUS
Inspire Pharmaceuticals				AU 9940839 A	HCAPLUS
Inspire Pharmaceuticals	1998			WO 9834942 A2	HCAPLUS
Inspire Pharmaceuticals	1999			WO 9961012 A2	HCAPLUS
Inspire Pharmaceuticals	2000			WO 0050024 A2	HCAPLUS
Kimura, K	1999	62	129	ARCHIVES OF HISTOLOG	HCAPLUS

L130 ANSWER 7 OF 31 HCAPLUS COPYRIGHT 2002 ACS
AN 2001:851183 HCAPLUS
DN 136:690
TI Method for **retinal** degeneration treatment with purinergic receptor agonists
IN **Peterson, Ward M.**
PA Inspire Pharmaceuticals, Inc., USA
SO PCT Int. Appl., 46 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001087913	A2	20011122	WO 2001-US15606	20010510
WO 2001087913	A3	20020530		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 2000-570231 A 20000512
OS MARPAT 136:690
AB Methods are disclosed for prevention or treatment of **retinal** degeneration arising from pathophysiol. or phys. conditions. The method involves administration of a pharmaceutical compn. comprising a purinergic P2Y receptor ligand, in an amt. effective to elevate its extracellular concn. to activate **retinal** glial and neuronal cell surface P2Y receptors and mount a neuroprotective response. Also disclosed are methods of administration including intravitreal bolus and sustained-release administration, transscleral delivery, topical, and systemic administration. The pharmaceutical compn. useful in the invention comprises a P2Y purinergic receptor agonist, which include uridine 5'-di -and triphosphate (UDP, UTP) and their analogs, ADP (ADP)

and its analogs, cytidine 5'-di- and triphosphate (CDP, CTP) and their analogs, and dinucleoside polyphosphate compds.

IT **63-39-8**, Uridine 5'-triphosphate **65-47-4**, Cytidine 5'-triphosphate **5542-28-9**, AP4A **5959-90-0** **30632-06-5 59985-21-6 63785-59-1** **81534-69-2 111648-11-4 188560-02-3** **211448-70-3 211448-78-1 211448-85-0** **345950-34-7**
RL: BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(method for **retinal** degeneration treatment with purinergic receptor agonists)

L130 ANSWER 8 OF 31 HCAPLUS COPYRIGHT 2002 ACS
AN 2001:763523 HCAPLUS
DN 135:298823
TI Use of P2Y receptor agonist dinucleotide compounds to stimulate removal of fluid in **retinal detachment** and **retinal** edema
IN **Peterson, Ward M.**; Yerxa, Benjamin R.
PA Peterson, Ward M., USA
SO U.S. Pat. Appl. Publ., 20 pp., Cont.-in-part of U.S. 5,837,861.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2001031743	A1	20011018	US 2001-774752	20010130
	US 5837861	A	19981117	US 1997-798508	19970210
	ZA 9801073	A	19990219	ZA 1998-1073	19980210
PRAI	US 1997-798508	A2	19970210		

OS MARPAT 135:298823
AB The invention provides a method of treating edematous **retinal** disorders. The method comprises administration of a P2Y receptor agonist to stimulate the removal of pathol. extraneous fluid from the subretinal and **retinal** spaces and thereby reduce the accumulation of said fluid assocd. with **retinal detachment** and **retinal** edema. The P2Y receptor agonist may be administered with therapeutic and adjuvant agents commonly used to treat edematous **retinal** disorders. The pharmaceutical compn. useful in this invention comprises a P2Y receptor agonist with enhanced resistance to extracellular hydrolysis, such as dinucleoside polyphosphate compds.

IT **5542-28-9 10527-48-7 59985-21-6** **83008-69-9 96920-51-3 111648-11-4** **148503-84-8 211427-06-4 211427-07-5** **211427-09-7 211427-10-0 211427-11-1** **211448-70-3 211448-72-5 211448-73-6** **211448-74-7 211448-75-8 211448-76-9** **211448-77-0 211448-78-1 211448-79-2** **211448-80-5 211448-81-6 211448-82-7** **211448-83-8 211448-84-9 211448-85-0** **318250-11-2**, INS 37217 **366004-15-1 366004-16-2** **366004-17-3 366004-18-4 366004-19-5** **366004-20-8 366004-21-9 366004-22-0** **366004-23-1**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(P2Y receptor agonist dinucleotide compds. to stimulate removal of fluid in **retinal detachment** and **retinal** edema)

L130 ANSWER 9 OF 31 HCAPLUS COPYRIGHT 2002 ACS
AN 2001:472479 HCAPLUS
DN 135:71289
TI Method of treating gastrointestinal tract disease with purinergic receptor agonists
IN Yerxa, Benjamin R.; Rideout, Janet L.; Pendergast, William; Shaver, Sammy R.; Zhang, Zhen; **Peterson, Ward M.**; Cowlen, Mathew
PA Inspire Pharmaceuticals, Inc., USA
SO PCT Int. Appl., 58 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001045691	A2	20010628	WO 2000-US35439	20001222
	WO 2001045691	A3	20020418		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1999-171710P P 19991222
OS MARPAT 135:71289
AB The invention provides a method of regulating water and mucin secretions and fluid transport in the gastrointestinal tract. The invention also provides a method for treating a gastrointestinal disease in which the mucosal barrier of the gastrointestinal system is impaired. The invention addnl. provides a method for correcting disorders of fluid secretion or absorption in the gastrointestinal system. The method comprises administering to a patient a pharmaceutical compn. comprising a purinergic P2Y receptor agonist, in an amt. effective to regulate water and mucin secretions or to correct abnormal fluid transport in the gastrointestinal tract. The pharmaceutical compn. used in this invention comprises a P2Y purinergic receptor agonist such as UDP, UTP, CDP, CTP, ADP, ATP, and their analogs, as well as dinucleotide polyphosphate compds. The compd. is prepd. in an oral, injectable, or suppository form, and administered to a patient.
IT **56-65-5**, Adenosine 5'-triphosphate, biological studies
58-64-0, Adenosine 5'-diphosphate, biological studies
58-98-0, Uridine 5'-diphosphate, biological studies
63-38-7, Cytidine 5'-diphosphate **63-39-8**, Uridine 5'-triphosphate **65-47-4**, Cytidine 5'-triphosphate
5542-28-9 5959-90-0 30632-06-5
34983-48-7, 2-Methylthio-ADP **59985-21-6**
63785-59-1 81534-69-2 111648-11-4
211448-70-3 211448-78-1 211448-85-0
345950-34-7
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(purinergic P2Y receptor agonists for treating gastrointestinal disease)

L130 ANSWER 10 OF 31 HCAPLUS COPYRIGHT 2002 ACS
AN 2001:342036 HCAPLUS
DN 135:147383
TI Therapeutic potential of nucleotides in the eye
AU Pintor, Jesus; Peral, Assumpta

CS Departamento de Bioquimica, E.U. Optica, Universidad Complutense de Madrid, Madrid, 28037, Spain
SO Drug Development Research (2001), 52(1/2), 190-195
CODEN: DDREDK; ISSN: 0272-4391
PB Wiley-Liss, Inc.
DT Journal
LA English
AB Adenine mononucleotides present the ability to produce changes in the intraocular pressure in New Zealand rabbits. Two main groups of compds. were found in terms of their behavior - on the one hand, those that increased intraocular pressure, and on the other hand, those that reduced it. The hypotensive compds. showed a concn.-response behavior, and were blocked by the P2 receptor antagonist pyridoxalphosphate-6-azophenyl-2',4'-disulfonic acid. Moreover, the hypotensive compds. were unaffected by the pretreatment with sympathetic antagonists but were completely abolished by the parasympathetic antagonists. This fact suggests the possibility of these P2 receptors to be present at the cholinergic terminal that control intraocular pressure. Adenine mononucleotides also were assayed in their ability to increase tear secretion rate. This study showed that tear secretion is stimulated via P2Y2 receptors.
IT **56-65-5**, Atp, biological studies **58-64-0**, Adp, biological studies **58-98-0**, Udp, biological studies **63-39-8**, Utp
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(therapeutic potential of nucleotides in ophthalmol.)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Abe, Y	1995	64	547	Neuroscience	HCAPLUS
Burnstock, G	1994	31	206	Drug Dev Res	
Burnstock, G	1996	38	67	Drug Dev Res	HCAPLUS
Crosson, C	1996	37	1833	Invest Ophthalmol Vi	MEDLINE
Crosson, C	1994	10	379	J Ocular Pharmacol	HCAPLUS
Crosson, C	1995	273	320	J Pharmacol Exp Ther	HCAPLUS
Davson, H	1993		34	Physiology of the ey	
Harden, T	1995	35	541	Ann Rev Pharmacol To	HCAPLUS
Howard, M	1998	39	1942	Invest Ophthalmol Vi	MEDLINE
James, S	1993	60	219	J Neurochem	HCAPLUS
Kaufman, P	1984		149	Handbook of experime	HCAPLUS
Lambrecht, G	1992	217	217	Eur J Pharmacol	HCAPLUS
Lutjen-Drecoll, J	1989		89	The glaucoma	
Maul, E	1979	18	256	Invest Ophthalmol Vi	HCAPLUS
Nishimura, T	1996	212	215	Neurosci Lett	HCAPLUS
Northway, M	1980	65	11	Eur J Pharmacol	HCAPLUS
Pintor, J	2000		171	Nervous control of t	
Ralevic, V	1998	50	413	Pharmacol Rev	HCAPLUS
Redman, R	1994	477	117	J Physiol (Lond)	HCAPLUS
Richardson, P	1987	48	622	J Neurochem	HCAPLUS
Rohen, J	1982		141	Basic aspect of glau	
Rohen, J	1964		189	Handbuch der mikrosk	
Shahidullah, M	1997	16	1006	Curr Eye Res	MEDLINE
Sun, X	1996	93	1859	Proc Natl Acad Sci U	HCAPLUS
Ueno, S	1992	68	778	J Neurophysiol	HCAPLUS
Wiederholt, M	1998		163	The eye's aqueous hu	HCAPLUS
Yerxa, B	1999		B723	Invest Ophthalmol Vi	
Zimmemmann, H	1993			Synaptic transmissio	
Zimmermann, H	1996	39	337	Drug Develop Res	HCAPLUS

L130 ANSWER 11 OF 31 HCAPLUS COPYRIGHT 2002 ACS
AN 2001:100986 HCAPLUS

DN 134:141776
TI Methods for transdifferentiation of body tissues
IN Baranowitz, Steven
PA USA
SO PCT Int. Appl., 51 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001008691	A1	20010208	WO 2000-US21015	20000731
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1200101	A1	20020502	EP 2000-955323	20000731
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				

PRAI US 1999-146272P P 19990729
US 1999-168555P P 19991202
WO 2000-US21015 W 20000731
AB This invention relates to methods for transdifferentiation of body tissues which can be used to generate specific cell types needed for regenerating organs or body parts, following cellular degeneration, injury or amputation. The present invention also describes the use of tissue transdifferentiation for treating cancer and autoimmune diseases.
IT **56-65-5**, Adenosine triphosphate, biological studies **58-64-0**, Adenosine diphosphate, biological studies **58-98-0**, Uridine diphosphate, biological studies **63-39-8**, Uridine triphosphate **491-97-4**, Thymidine diphosphate
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(transdifferentiation by; methods for transdifferentiation of body tissues for use for regenerating organs or body parts or treating cancer and autoimmune disease)
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Levesque	2000			US 6087168 A	HCAPLUS
Noji, S	1991	350	83	Retinoic acid induce	HCAPLUS
Tabin, C	1991	66	199	Cell	HCAPLUS
Wanek, N	1991	350	81	Nature	HCAPLUS

L130 ANSWER 12 OF 31 HCAPLUS COPYRIGHT 2002 ACS
AN 2000:608596 HCAPLUS
DN 133:187988
TI Methods and compositions for altering mucus secretion
IN Li, Yuehua; Martin, Linda D.; Adler, Kenneth B.
PA North Carolina State University, USA
SO PCT Int. Appl., 66 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI	WO 2000050062	A2	20000831	WO 2000-US5050	20000224
	WO 2000050062	A3	20001221		
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1154786	A2	20011121	EP 2000-912034	20000224
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRAI	US 1999-256154	A	19990224		
	WO 2000-US5050	W	20000224		

AB Methods and compds. for increasing or decreasing mucus secretion in subjects, and particularly mucus secretion in the airways, are described. The use of compds. that modulate MARCKS protein-related mucus secretion is described. Methods of screening compds. for the ability to increase or decrease mucus secretion are also described.

IT **63-39-8**, Uridine 5'-triphosphate
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(methods and compns. for altering MARCKS protein-related mucus secretion)

L130 ANSWER 13 OF 31 HCAPLUS COPYRIGHT 2002 ACS
AN 2000:608567 HCAPLUS
DN 133:187963
TI Method of promoting mucosal hydration with certain uridine, adenine and cytidine diphosphates and analogs thereof
IN Yerxa, Benjamin R.; Rideout, Janet L.; Jones, Arthur C.
PA Inspire Pharmaceuticals, Inc., USA
SO PCT Int. Appl., 38 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 3

PI	WO 2000050024	A2	20000831	WO 2000-US5282	20000225
	WO 2000050024	A3	20010705		
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1161246	A2	20011212	EP 2000-914781	20000225
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	BR 2000008498	A	20020205	BR 2000-8498	20000225
PRAI	US 1999-121754P	P	19990226		
	WO 2000-US5282	W	20000225		

OS MARPAT 133:187963

AB A method and prepn. for the stimulation of mucosal hydration in a subject in need of such treatment is disclosed. The method comprises

administering to the mucosal surfaces of the subject a purinergic receptor agonist such as UDP, dinucleotides, CDP, ADP, or their therapeutically useful analogs and derivs., in an amt. effective to stimulate mucin secretion. Pharmaceutical formulations and methods of making the same are also disclosed. Methods of administering the same would include: topical administration via a liq., gel, cream, or as part of a contact lens or selective release membrane; or systemic administration via nasal drops or spray, inhalation by nebulizer or other device, oral form (liq. or pill), injectable, intra-operative instillation or suppository form. A method for facilitating the expectoration of sputum for the purpose of detecting cellular abnormalities indicative of lung disease is also disclosed. Uridine diphosphate at 104-10-8 M increased mucin release in cultured epithelial and goblets cells.

IT **58-64-0**, Adenosine 5'-(trihydrogen diphosphate), biological studies **58-98-0**, Uridine diphosphate, biological studies **63-38-7**, Cytidine diphosphate
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(method of promoting mucosal hydration with certain uridine, adenine and cytidine diphosphates and analogs thereof)

L130 ANSWER 14 OF 31 HCAPLUS COPYRIGHT 2002 ACS
AN 2000:456859 HCAPLUS
DN 133:79356
TI Synthetic and therapeutic methods for the alpha and beta domains of metallothionein
IN Vallee, Bert L.
PA USA
SO PCT Int. Appl., 64 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000038654	A1	20000706	WO 1999-US30573	19991221

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1998-113459P P 19981223
AB The present invention relates to the alpha and beta domains of metallothionein and analogs thereof, their synthesis, and therapeutic applications of them. Purified metal-free and metal-contg. alpha and beta domains of metallothionein are provided. A high yield method of synthesis and purifn. is also provided for the metal-free and metal-contg. alpha and beta domains of metallothionein. Finally, therapeutic methods are provided that use the alpha and beta domains of metallothionein to transport selected metals to specific tissues or to sequester metals from these tissues in order to treat conditions in those tissues that are ameliorated by the addn. or sequestration of these metals.

IT **56-65-5**, 5'-Atp, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(synthetic and therapeutic methods for the alpha and beta domains of metallothionein)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Bofill	1999	73	57	Journal of Inorganic	HCAPLUS
Goldenberg	1998			US 5736119 A	HCAPLUS
Kull	1990	112	2291	Journal of the Ameri	HCAPLUS
Nielson	1985	260	8698	The Journal Of Biolo	HCAPLUS
Pan	1994	202	621	Biochemical And Biop	HCAPLUS
Riniker	1975			US 3910872 A	HCAPLUS
Tolman, G	1988			US 4732864 A	HCAPLUS
Winge	1984	259	11419	The Journal Of Biolo	HCAPLUS
Yoshida	1979	76	486	Proceedings of the N	HCAPLUS

L130 ANSWER 15 OF 31 HCAPLUS COPYRIGHT 2002 ACS
AN 2000:393890 HCAPLUS
DN 133:838
TI Method for treating hemorrhage into eye internal media and sclera and **retina**
IN Mukha, A. I.
PA Russia
SO Russ.
From: Izobreteniya 1998, (27), 352.
CODEN: RUXXE7
DT Patent
LA Russian
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2119316	C1	19980927	RU 1996-113149	19960624

AB Title only translated.
IT **56-65-5**, 5'-ATP, biological studies
RL: ANT (Analyte); BOC (Biological occurrence); BSU (Biological study, unclassified); **THU (Therapeutic use)**; ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(method for treating hemorrhage into eye internal media and sclera and **retina**)

L130 ANSWER 16 OF 31 HCAPLUS COPYRIGHT 2002 ACS
AN 2000:335023 HCAPLUS
DN 132:339428
TI Defined serum-free medical solution for ophthalmology
IN Skelnik, Debra A.
PA Bausch and Lomb Surgical, Inc., USA
SO Eur. Pat. Appl., 27 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1000541	A1	20000517	EP 1999-308702	19991102
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6153582	A	20001128	US 1998-186580	19981105
AU 9957108	A1	20000511	AU 1999-57108	19991028
JP 2000198701	A2	20000718	JP 1999-313063	19991102
PRAI US 1998-186580	A	19981105		

AB The title soln. contains one or more cell nutrient supplements and a growth factor which maintains and enhances the preservation of eye tissues, including human corneal, **retinal**, and corneal epithelial tissues at low to physiol. temp. (2-38.degree.). This soln. is composed of a defined aq. nutrient and electrolyte soln., supplemented

with glycosaminoglycans, deturgescent agents, energy sources, buffer systems, antioxidants, membrane stabilizers, antibiotics, antimycotics, ATP or energy precursors, nutrient cell supplements, nonessential amino acids, trace minerals, trace elements, and growth factors.

IT **14264-46-1**, Sodium UTP
RL: **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(serum-free medical solns. for ophthalmol.)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Lindstrom, R	1992			EP 0516901 A	HCAPLUS
Lindstrom, R	1992			EP 0517972 A	HCAPLUS

L130 ANSWER 17 OF 31 HCAPLUS COPYRIGHT 2002 ACS
AN 2000:246640 HCAPLUS
DN 132:241937
TI Citicoline compositions for treating optic nerve atrophy
IN Wang, Haiyan
PA Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 5 pp.
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1195526	A	19981014	CN 1994-103533	19940421

AB The title compns. [injections] comprise citicoline 60, arginine 1, ATP 1, inosine 30, procaine 0.5, buffer soln. (pH 4-8) 0.5 parts, and injection water 2 mL. The compns. are prepd. by mixing the ingredients, ultrafiltering, drying by freezing, and sterilizing with Co-60.

IT **56-65-5**, ATP, biological studies
RL: **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(citicoline compns. for treating optic nerve atrophy)

L130 ANSWER 18 OF 31 HCAPLUS COPYRIGHT 2002 ACS
AN 1999:763861 HCAPLUS
DN 132:453
TI Therapeutic dinucleotide and derivatives
IN Yerxa, Benjamin R.; Pendergast, William; Rideout, Janet L.; Picher, Maryse; Boucher, Richard C.; Stutts, Monroe Jackson
PA Inspire Pharmaceuticals, Inc., USA; The University of North Carolina at Chapel Hill
SO PCT Int. Appl., 23 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9961012	A2	19991202	WO 1999-US10948	19990519
WO 9961012	A3	20000210		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9940839	A1	19991213	AU 1999-40839	19990519

AU 746750 B2 20020502
EP 1087777 A2 20010404 EP 1999-924313 19990519
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI
JP 2002516273 T2 20020604 JP 2000-550472 19990519
US 6323187 B1 20011127 US 1999-316571 19990521
PRAI US 1998-86543P P 19980522
WO 1999-US10948 W 19990519

AB The present invention relates to P1-(cytidine-5'-)-P4-(uridine 5'-)tetraphosphate and its salts, esters and amides, and formulations thereof which are highly stable and selective agonists of the P2Y2 and/or P2Y4 purinergic receptor. The compds. of the invention are useful in the treatment of chronic obstructive pulmonary diseases such as chronic bronchitis, primary ciliary dyskinesia, cystic fibrosis, as well as prevention of pneumonia due to immobility, and the induction of sputum and its expectoration. Furthermore, because of their general ability to clear retained mucus secretions and stimulate ciliary beat frequency, the compds. of the present invention are also useful in the treatment of sinusitis and otitis media.

IT **251317-44-9P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(dinucleotides as selective purinoceptor agonists for treatment of obstructive pulmonary diseases)

IT **211448-85-0 211448-85-0D**, esters
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(dinucleotides as selective purinoceptor agonists for treatment of obstructive pulmonary diseases)

L130 ANSWER 19 OF 31 HCAPLUS COPYRIGHT 2002 ACS
AN 1999:388060 HCAPLUS
DN 131:31034
TI Purification and therapeutic application of peptide complexes with heat shock proteins
IN Wallen, Erik S.; Moseley, Pope L.
PA The University of New Mexico, USA
SO PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 3

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9929182	A1	19990617	WO 1998-US25734	19981204
W: BR, CA, JP, MX				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5981706	A	19991109	US 1997-986234	19971205
CA 2312049	AA	19990617	CA 1998-2312049	19981204
EP 1035780	A1	20000920	EP 1998-961905	19981204
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2001525347	T2	20011211	JP 2000-523867	19981204
PRAI US 1997-985548	A	19971205		
US 1997-986234	A	19971205		
US 1996-717239	A2	19960920		
US 1997-934139	A2	19970919		
WO 1998-US25734	W	19981204		

AB The authors disclose methods for synthesizing heat shock protein (hsp)-peptide complexes. The complexes are prepd. by capturing the hsps

on agarose-immobilized gelatin and effecting their elution with the derived peptide(s). Alternatively, the heat shock proteins are captured on an affinity matrix as complexes with ADP prior to their subsequent elution with peptide(s). In addn., the present invention also provides a method for treating an allergic disease in which a heat shock protein-antigen complex is administered to a mammal in an amt. sufficient to reduce the susceptibility of the mammal to a Th2 response for the allergic disease. In an example of desensitization, mice were pretreated with HSP70 complexes contg. peptides derived from the Fel d 1 allergen prior to antigen challenge.

IT **56-65-5**, 5'-ATP, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(for in situ generation of ADP-heat-shock protein complexes)

IT **58-64-0DP**, 5'-ADP, heat-shock protein-peptide complexes
RL: BPN (Biosynthetic preparation); PUR (Purification or recovery); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn., purifn., and antiallergenic application of)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Gao	1996	278	16792	Journal of Biologica	
Palleros	1994	269	13107	Journal of Biologica	HCAPLUS
Peng	1997	204	13	Journal of Immunolog	HCAPLUS
Srivastava	1994	6	728	Current Opinions in	HCAPLUS
Srivastava	1994	39	93	Immunogenetics	HCAPLUS
Srivastava, P	1993	62	153	Advances in Cancer R	HCAPLUS

L130 ANSWER 20 OF 31 HCAPLUS COPYRIGHT 2002 ACS
AN 1999:184143 HCAPLUS
DN 130:218318
TI Use of purine nucleosides for modulating the axonal outgrowth of central nervous system neurons
IN Benowitz, Larry I.
PA Children's Medical Center Corporation, USA
SO PCT Int. Appl., 43 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9911274	A1	19990311	WO 1998-US3001	19980220
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	CA 2302156	AA	19990311	CA 1998-2302156	19980220
	AU 9866568	A1	19990322	AU 1998-66568	19980220
	EP 1009412	A1	20000621	EP 1998-908565	19980220
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2001516695	T2	20011002	JP 2000-508376	19980220
	US 2002042390	A1	20020411	US 2001-997688	20011129
	US 2002055484	A1	20020509	US 2001-997687	20011129
PRAI	US 1997-921902	A2	19970902		
	WO 1998-US3001	W	19980220		

AB Methods and compns. for modulating the axonal outgrowth of central nervous system neurons are provided. Methods for stimulating the axonal outgrowth of central nervous system neurons following an injury (e.g., stroke, Traumatic Brain Injury, cerebral aneurism, spinal cord injury and the like) and methods for inhibiting the axonal outgrowth of central nervous system neurons in conditions such as epilepsy, e.g., post-traumatic epilepsy, and neuropathic pain syndrome, are also provided. These methods generally involve contacting the central nervous system neurons with a purine nucleoside, or analog thereof. Preferably, inosine or guanosine is used to stimulate axonal outgrowth and 6-thioguanine is used to inhibit axonal outgrowth. The methods and compns. are particularly useful for modulating the axonal outgrowth of mammalian central nervous system neurons, such as mammalian **retinal** ganglion cells. Pharmaceutical and packaged formulations that include the purine nucleosides, and analogs thereof, of the invention are also provided.

IT **56-65-5**, 5'-ATP, biological studies **58-64-0**, 5'-ADP, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(purine nucleosides and analogs for modulating the axonal outgrowth of central nervous system neurons)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Greene, L	1990	10		J NEUROSCI	HCAPLUS
Gysbers, J	1996	14		INT J DEV NEUROSCI	HCAPLUS
Gysbers, J	1992	3	997	NEUROREPORT	HCAPLUS
Medcament, P	1994			WO 9400132 A	HCAPLUS
Svensson, B	1993	5		EUR J NEUROSCI	MEDLINE

L130 ANSWER 21 OF 31 HCAPLUS COPYRIGHT 2002 ACS
AN 1999:166635 HCAPLUS
DN 130:205970
TI Compositions, kits, and methods for effecting adenine nucleotide modulation of DNA mismatch recognition proteins
IN Fishel, Richard; Gradia, Scott; Acharya, Samir
PA Thomas Jefferson University, USA
SO PCT Int. Appl., 165 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9910369	A1	19990304	WO 1998-US17914	19980828
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 9891251	A1	19990316	AU 1998-91251	19980828
	US 6333153	B1	20011225	US 1998-143571	19980828
	US 2002058275	A1	20020516	US 2001-934909	20010822
PRAI	US 1997-57136P	P	19970828		
	US 1997-66977P	P	19971128		
	US 1998-93935P	P	19980723		
	US 1998-143571	A3	19980828		
	WO 1998-US17914	W	19980828		

AB Compns., and products comprising a MutS homolog which binds to a mismatched region of a duplex DNA mol. in the presence of ADP are provided, as are methods of binding MutS homologs to mismatched DNA in the presence of ADP. Heterodimers of hMSH2:hMH6 are demonstrated to act as a mol. switch which is activatable by ADP based on the activity in binding to mismatched duplex DNA, ATPase activity, and function in mismatch repair. The use of MutL homolog derivs. in combination with MutS homologs is also included. Mutations obsd. in hMSH2 affect the interaction of hMSH2 with other MutS homologs and are assocd. with hereditary non-polyposis colon cancer. Purified human MSH5 homolog and its cDNA sequence are also provided. Finally, nonhuman mammals which are nullizygous for both Msh2 and p53 are also provided, as are methods of making and using the same. The compns. of the present invention have applications as diagnostic reagents in deg. whether a compd. affects tumorigenesis, apoptosis, aging, fetal development, and gene expression of p53 and MutS.

IT **56-65-5**, 5'-ATP, biological studies **58-64-0**, 5'-ADP, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(adenine nucleotide modulation of DNA mismatch recognition protein MutS and MutL homologs)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Acharya	1996	93	13629	Proc Natl Acad Sci U	HCAPLUS
Chi	1994	269	29984	J Biol Chem	HCAPLUS
Chi	1994	269	29993	J Biol Chem	HCAPLUS
Drummond	1995	268	1909	Science	HCAPLUS
Fearon	1990	61	759	Cell	HCAPLUS
Fishel	1994	84	5539	Cancer Res	
Fishel	1993	75	1027	Cell	HCAPLUS
Fishel	1994	266	1403	Science	HCAPLUS

L130 ANSWER 22 OF 31 HCAPLUS COPYRIGHT 2002 ACS
AN 1998:744969 HCAPLUS
DN 130:20593
TI The use of biologically active substances for influencing the extracellular space of sensory cells
IN Eckmiller, Marion Sangster
PA Germany
SO PCT Int. Appl., 70 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 1

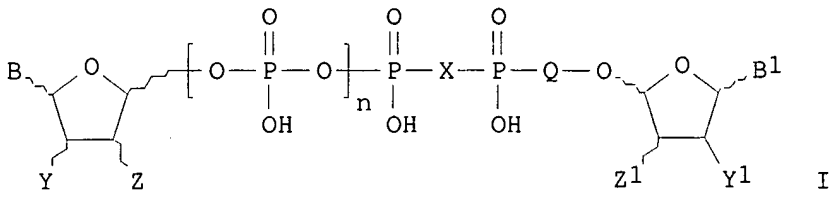
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9850065	A2	19981112	WO 1998-EP1951	19980402
	WO 9850065	A3	19990610		
	W: AM, AT, AU, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GM, GW, HU, IL, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TT, UA, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	DE 19718826	A1	19981112	DE 1997-19718826	19970505
	AU 9876417	A1	19981127	AU 1998-76417	19980402
	EP 980256	A2	20000223	EP 1998-924097	19980402

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI
PRAI DE 1997-19718826 19970505
WO 1998-EP1951 19980402
AB The invention relates to the use of an active substance influencing the calcium homeostasis of cells to treat degeneration of sensory cells and adjacent cells. The effect of higher Ca concns. with and without calpain inhibitors on the structure of **retinal** outer segments was detd.
IT **56-65-5**, ATP, biological studies **58-64-0**, ADP, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(drugs for influencing extracellular area of sensory cells)

L130 ANSWER 23 OF 31 HCAPLUS COPYRIGHT 2002 ACS
AN 1998:550430 HCAPLUS
DN 129:175919
TI Preparation of dinucleotides and their use as modulators of mucociliary clearance and ciliary beat frequency
IN Pendergast, William; Yerxa, Benjamin R.; Rideout, Janet L.; Siddiqi, Suhaib M.
PA Inspire Pharmaceuticals, Inc., USA
SO PCT Int. Appl., 49 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 4

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9834942	A2	19980813	WO 1998-US2702	19980206
WO 9834942	A3	20000106		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5900407	A	19990504	US 1997-797472	19970206
US 5837861	A	19981117	US 1997-798508	19970210
AU 9863242	A1	19980826	AU 1998-63242	19980206
AU 738907	B2	20010927		
EP 981534	A2	20000301	EP 1998-907435	19980206
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
BR 9807169	A	20000606	BR 1998-7169	19980206
JP 2001526635	T2	20011218	JP 1998-535055	19980206
US 6348589	B1	20020219	US 1998-101395	19980710
NO 9903776	A	19991006	NO 1999-3776	19990804
US 2002082417	A1	20020627	US 2001-7451	20011106
PRAI US 1997-797472	A2	19970206		
US 1997-798508	A2	19970210		
WO 1998-US2702	W	19980206		
US 1998-101395	A1	19980710		

OS MARPAT 129:175919
GI



I

AB The present invention relates to certain novel dinucleotides I (X = O, CH2, imido, CF2; B, B1 = independently nucleobase; Z, Z1 = independently OH, N3; Y, Y1 = independently H, OH; Q = (HPO3)m; n = 0-2; m = 0-2; n + m = 0-4) and formulations thereof which are highly selective agonists of the P2Y2 and/or P2Y4 purinergic receptor. They are useful in the treatment of chronic obstructive pulmonary diseases such as chronic bronchitis, PCD, cystic fibrosis, as well as prevention of pneumonia due to immobility. Furthermore, because of their general ability to clear retained mucus secretions and stimulate ciliary beat frequency, the compds. of the present invention are also useful in the treatment of sinusitis, otitis media and nasolacrimal duct obstruction. They are also useful for treatment of dry eye disease and **retinal detachment**.
Thus, P1,P2-di(uridine-5'-)-P2,P3-methylenetetraphosphate was prepd. as P2Y2 and/or P2Y4 purinergic receptor (EC50 = 11.1 .mu.mol).

IT **2596-55-6P 4130-19-2P 5542-28-9P**
5959-90-0P 6674-45-9P 10527-46-5P
10527-48-7P 13457-68-6P 26184-65-6P
30632-08-7P 34692-44-9P 41708-91-2P
56983-23-4P 59985-20-5P 59985-21-6P
61340-12-3P 63785-59-1P 79695-24-2P
79695-25-3P 83008-69-9P 88109-92-6P
96920-51-3P 97776-54-0P 97776-55-1P
103137-88-8P 103137-89-9P 111035-55-3P
111648-11-4P 134311-47-0P 135780-83-5P
135780-85-7P 135780-92-6P 135802-64-1P
154960-70-0P 170638-56-9P 170638-57-0P
170638-58-1P 170638-59-2P 170638-60-5P
170638-61-6P 170638-62-7P 211427-06-4P
211427-09-7P 211427-11-1P 211448-67-8P
211448-72-5P 211448-73-6P 211448-74-7P
211448-76-9P 211448-77-0P 211448-78-1P
211448-79-2P 211448-80-5P 211448-81-6P
211448-88-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of dinucleotides and their use as modulators of mucociliary clearance and ciliary beat frequency)

IT **63-39-8**, Uridine 5'-triphosphate **19817-92-6**
211448-71-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of dinucleotides and their use as modulators of mucociliary clearance and ciliary beat frequency)

IT **211427-07-5P 211448-70-3P 211448-75-8P**
211448-82-7P 211448-83-8P 211448-84-9P
211448-85-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of dinucleotides and their use as modulators of mucociliary clearance and ciliary beat frequency)

L130 ANSWER 24 OF 31 HCAPLUS COPYRIGHT 2002 ACS

AN 1998:548515 HCAPLUS
DN 129:180137
TI Method of treating dry eye disease with purinergic receptor agonists
IN Yerxa, Benjamin R.; Jacobus, Karla M.; Pendergast, William; Rideout, Janet L.
PA Inspire Pharmaceuticals, Inc., USA
SO PCT Int. Appl., 41 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9834593	A1	19980813	WO 1998-US2701	19980206
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	US 5900407	A	19990504	US 1997-797472	19970206
	AU 9863241	A1	19980826	AU 1998-63241	19980206
	AU 735684	B2	20010712		
	ZA 9800979	A	19990219	ZA 1998-979	19980206
	EP 1003474	A1	20000531	EP 1998-907434	19980206
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2001504858	T2	20010410	JP 1998-535054	19980206
	BR 9809562	A	20011002	BR 1998-9562	19980206
	NO 9903777	A	19991005	NO 1999-3777	19990804
	US 2002065244	A1	20020530	US 2001-10055	20011109
PRAI	US 1997-797472	A2	19970206		
	WO 1998-US2701	W	19980206		
	US 1998-171169	A1	19981014		

OS MARPAT 129:180137
AB A method and prepn. for the stimulation of tear secretion in a subject in need of such treatment is disclosed. The method comprises administering to the ocular surfaces of the subject a purinergic receptor agonist such as UTP, dinucleotides, CTP, ATP, or their therapeutically useful analogs and derivs., in an amt. effective to stimulate tear fluid secretion and enhance drainage of the lacrimal system. Pharmaceutical formulations and methods of making the same are also disclosed. Methods of administering the same would include: topical administration via a liq., gel, cream, or as part of a contact lens or selective release membrane; or systemic administration via nasal drops or spray, inhalation by nebulizer or other device, oral form (liq. or pill), injectable, intra-operative instillation or suppository form. P1,P4-di(uridine tetraphosphate) tetrasodium salt (I) was formulated as an isotonic aq. soln. and topically administered to the eyes of rabbits; I at 0.5, 5.0, and 8.5 % concn. significantly increased tear secretion.
IT **56-65-5**, ATP, biological studies **63-39-8**, UTP **65-47-4**, CTP **211427-06-4 211427-07-5 211427-08-6 211427-09-7 211427-10-0 211427-11-1**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(dry eye disease treatment with purinergic receptor agonists)

L130 ANSWER 25 OF 31 HCAPLUS COPYRIGHT 2002 ACS
AN 1998:248716 HCAPLUS

DN 128:248610
TI Compositions containing cereb for treating optic atrophy
IN Hu, Chang; Yu, Dongsheng; Wang, Lin
PA Gete Biological Engineering Science & Technology Development Co., Beijing, Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 7 pp.
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1138985	A	19970101	CN 1995-104482	19950628
	CN 1036119	B	19971015		

AB Compns. [freeze-dried injections] for treating optic atrophy contain cereb and inosine, ATP and/or CoA at 3-7 : 0.5-2 : 0.1-3 : 0.1-2.5. Effectiveness was clin. tested.
IT **56-65-5**, ATP, biological studies
RL: **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(compns. contg. cereb for treating optic atrophy)

L130 ANSWER 26 OF 31 HCAPLUS COPYRIGHT 2002 ACS
AN 1998:152041 HCAPLUS
DN 128:261811
TI Preparation of liposome-encapsulating adenosine triphosphate
AU Arakawa, Akira; Ishiguro, Sei-Ichi; Ohki, Kazuo; Tamai, Makoto
CS Department Ophthalmology, Tohoku University School Medicine, Sendai, 980-8574, Japan
SO Tohoku Journal of Experimental Medicine (1998), 184(1), 39-47
CODEN: TJEMAO; ISSN: 0040-8727
PB Tohoku University Medical Press
DT Journal
LA English
AB Liposomes encapsulating ATP (ATP) were prepd. by sonication, and the liposomes were evaluated for use in a drug delivery system. The liposomes, which were composed of phosphatidylcholine and cholesterol, were about 1.1 .mu.m in size, as obsd. under a microscope. From their size, the vesicles were thought to be multilamellar. The max. concn. of ATP in the liposomes was 1.0 mM, when the initial concns. of lipid and ATP were 20 mM and 300 mM, resp. The max. entrapment ratio of ATP in the liposomes was 88%, when the initial concns. of lipid and ATP were 20 mM and 500 mM, resp. About 4% of ATP was encapsulated in these expts. When liposomes contained 4-7% of cholesterol, about 35% of encapsulated ATP was released from the liposomes for 90 h at 37.degree.C in vitro. These findings indicated that liposomes encapsulating ATP could be used for the treatment of ischemic **retina**.
IT **56-65-5**, Atp, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); **THU (Therapeutic use)**; BIOL (Biological study); PROC (Process); USES (Uses)
(prepn. of liposome-encapsulated ATP)

L130 ANSWER 27 OF 31 HCAPLUS COPYRIGHT 2002 ACS
AN 1998:38360 HCAPLUS
DN 128:93211
TI Medicament base for local use in the eyes
PA Schrage, Norbert, Germany
SO Ger. Offen., 4 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19626479	A1	19980108	DE 1996-19626479	19960702

AB A phosphate-free buffered isotonic soln. for application to the cornea is provided for buffering and neutralizing corrosive or irritating substances in the eye. The soln. contains the same proportions of electrolytes as the cornea as well as sugars, polyols, polysaccharides, amino acids, and org. buffers such as maleate, citrate, acetate, HEPES, or Tris. Phosphates are omitted to prevent calcification of the cornea.

IT **56-65-5**, 5'-ATP, biological studies
RL: **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(medicament base for local use in eyes)

L130 ANSWER 28 OF 31 HCAPLUS COPYRIGHT 2002 ACS
AN 1997:472375 HCAPLUS
DN 127:130966
TI Effects of adrenergic agents and phosphodiesterase inhibitors on outflow facility and cell shape of bovine trabecular meshwork
AU Suzuki, Ryo; Karageuzian, Levon N.; Crean, Edmund V.; Anderson, P. John
CS Department of Ophthalmology, Yamaguchi University School of Medicine, Ube, 755, Japan
SO Japanese Journal of Ophthalmology (1997), 41(1), 31-37
CODEN: JJOPA7; ISSN: 0021-5155
PB Elsevier
DT Journal
LA English
AB Changes in the outflow facility of perfused calf eyes and in the shape of cells in cultured trabecular meshwork (TM) have been studied, following exposure to adrenergic agents and phosphodiesterase inhibitors (PDE). Dobutamine caused confluent TM cells to change their usual polygonal shape to a characteristic stellate shape. Salbutamol had no effect, but PDE inhibitors, isobutylmethylxanthine (IBMX), theophylline, and caffeine were very effective in producing this shape change. Epinephrine, isoproterenol, dobutamine, and salbutamol did not increase the outflow facility, either at 22.degree. or 36.degree., while theophylline, caffeine, and IBMX did increase it in a dose-dependent manner. The high concns. of .beta.-adrenergic agents required to produce even a small change in outflow facility and cell shape argue against the involvement of adrenergic-receptor mediation and may suggest another mechanism; on the other, the enhancement of epinephrine effects by PDE inhibitors and the similar effect produced by cyclic adenosine 3',5'-cyclic phosphate (cAMP) and purines suggest that changes in the cell shape are produced by .beta.-receptor activation. The .beta.-adrenergic agents were not effective in changing outflow facility, but the PDE inhibitors were remarkably effective both in changing the shape and in increasing facility. The results are discussed in relation to treatment of **glaucoma**.

IT **56-65-5**, 5'-ATP, biological studies **58-64-0**, 5'-ADP, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(effects of adrenergic agonists and phosphodiesterase inhibitors on outflow facility and cell shape of bovine trabecular meshwork in relation to **glaucoma** treatment)

L130 ANSWER 29 OF 31 HCAPLUS COPYRIGHT 2002 ACS
AN 1997:209102 HCAPLUS
DN 126:275487
TI Extracellular ATP activates calcium signaling, ion, and fluid transport in retinal pigment epithelium
AU **Peterson, Ward M.**; Meggyesy, Chris; Yu, Kefu; Miller, Sheldon S.
CS School of Optometry and Department of Molecular and Cell Biology,

University of California, Berkeley, CA, 94720, USA
SO Journal of Neuroscience (1997), 17(7), 2324-2337
CODEN: JNRSDS; ISSN: 0270-6474
PB Society for Neuroscience
DT Journal
LA English
AB The presence of receptors for ATP has not been established in any native prepn. of retinal neurons or glia. In the present study, we used conventional electrophysiol. and [Ca2+]in fluorescence imaging techniques to investigate the effects of ATP added to Ringer's soln. perfusing the retinal-facing (apical) membrane of freshly isolated monolayers of bovine retinal pigment epithelium (RPE). ATP (or UTP) produced large, biphasic voltage and resistance changes with a Kd of .apprx.5 .mu.M for ATP and .apprx.1 .mu.M for UTP. Elec. and pharmacol. evidence indicates that the first and second phases of the response are attributable to an increase in basolateral membrane Cl conductance and a decrease in apical membrane K conductance, resp. The ATP-induced responses were not affected by adenosine, but were reduced by the P2-purinoceptor blocker suramin. ATP also produced a large, transient increase in [Ca2+]in that was blocked by cyclopiazonic acid, an inhibitor of endoplasmic reticulum Ca2+-ATPases. The calcium buffer BAPTA attenuated the voltage effects of ATP. We also found that apical DIDS significantly inhibited the ATP-evoked [Ca2+]in and elec. responses, suggesting that DIDS blocked the purinoceptor. Measurements of fluid movement across the RPE using the capacitance probe technique demonstrated a significant increase in fluid absorption by apical UTP. These data indicate the presence of metabotropic P2Y/P2U-purinoceptors at the RPE apical membrane and implicate extracellular ATP in vivo as a retinal signaling mol. that could help regulate the hydration and chem. compn. of the subretinal space.
IT **56-65-5**, 5'-ATP, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(extracellular ATP activates calcium signaling, ion, and fluid transport in retinal pigment epithelium)
IT **63-39-8**, UTP
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(extracellular ATP activates calcium signaling, ion, and fluid transport in retinal pigment epithelium in relation to)

L130 ANSWER 30 OF 31 HCAPLUS COPYRIGHT 2002 ACS
AN 1996:537788 HCAPLUS
DN 125:158638
TI Method of treatment of diabetes mellitus by administration of adenosine 5'-triphosphate and other adenine nucleotides
IN Rapaport, Eliezer
PA USA
SO U.S., 6 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5547942	A	19960820	US 1994-177771	19940104

AB The administration of adenine nucleotides or adenosine and inorg. phosphate to a human patient results in the generation of elevated liver, other organ, and red blood cell ATP pools as well as increased levels of ATP in the extracellular blood plasma compartment of the blood. The present invention deals with the utilization of the elevated extracellular levels of ATP for achieving the well-established stimulation of insulin secretion following the interactions of extracellular ATP pools with pancreatic .beta. cell purine receptors. The invention is therefore

concerned with the treatment of patients suffering from non-insulin-dependent diabetes mellitus (NIDDM or Type-II diabetes) and their chronic clin. complications which are the result of continuous hyperglycemia, by the administration of these physiol. agents.

IT **56-65-5**, Adenosine 5'-triphosphate, biological studies
58-64-0, Adenosine 5'-diphosphate, biological studies
RL: **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(ATP and other adenine nucleotides for diabetes treatment)

L130 ANSWER 31 OF 31 HCAPLUS COPYRIGHT 2002 ACS
AN 1995:416436 HCAPLUS
DN 122:170250
TI Pharmaceutical compositions containing inhibitors of proteic ADP ribosylation are useful to prevent the diabetes mellitus complications
IN Gorio, Alfredo; Borella, Fabio
PA Instituto Biochimico Italiano Giovanni Lorenzini S.p.A., Italy
SO Eur. Pat. Appl., 17 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 638309	A1	19950215	EP 1994-110805	19940712
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
PRAI IT 1993-MI1554		19930714		

AB Pharmaceutical compns. contg. inhibitors of proteic ADP ribosylation are useful to prevent the diabetes mellitus complications such as neuropathies, nephropathies, **retinopathies**, macroangiopathies, microangiopathies, and hepatopathies. The effectiveness of vitamin K1 in decreasing blood glucose level of diabetic rats is reported. A hard gelatin pearl contained vitamin K1 10, lactose 62, maize starch 27, and Mg stearate 1mg.

IT **58-64-0**, ADP, biological studies
RL: BAC (Biological activity or effector, except adverse); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(ribosylation inhibitors; pharmaceutical compns. contg. inhibitors of proteic ADP ribosylation for prevention of diabetes mellitus complications)

=>
=> fil reg
FILE 'REGISTRY' ENTERED AT 13:12:00 ON 16 JUL 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

STRUCTURE FILE UPDATES: 15 JUL 2002 HIGHEST RN 438572-95-3
DICTIONARY FILE UPDATES: 15 JUL 2002 HIGHEST RN 438572-95-3

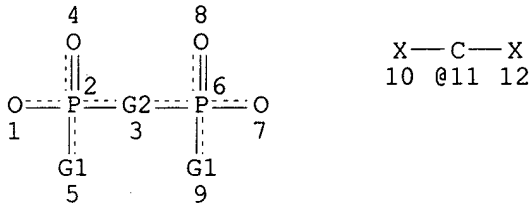
TSCA INFORMATION NOW CURRENT THROUGH January 7, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

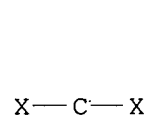
Crossover limits have been increased. See HELP CROSSOVER for details.

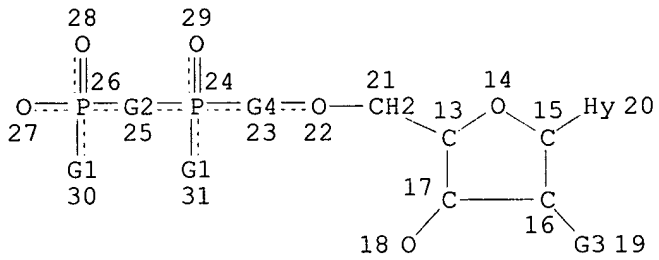
Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

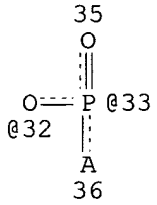
```
=> d sta que l40
L10             STR
```




```
VAR G1=O/S
VAR G2=O/CH2/NH/11
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  12

STEREO ATTRIBUTES: NONE
L12       24293 SEA FILE=REGISTRY SSS FUL L10
L13             STR
```

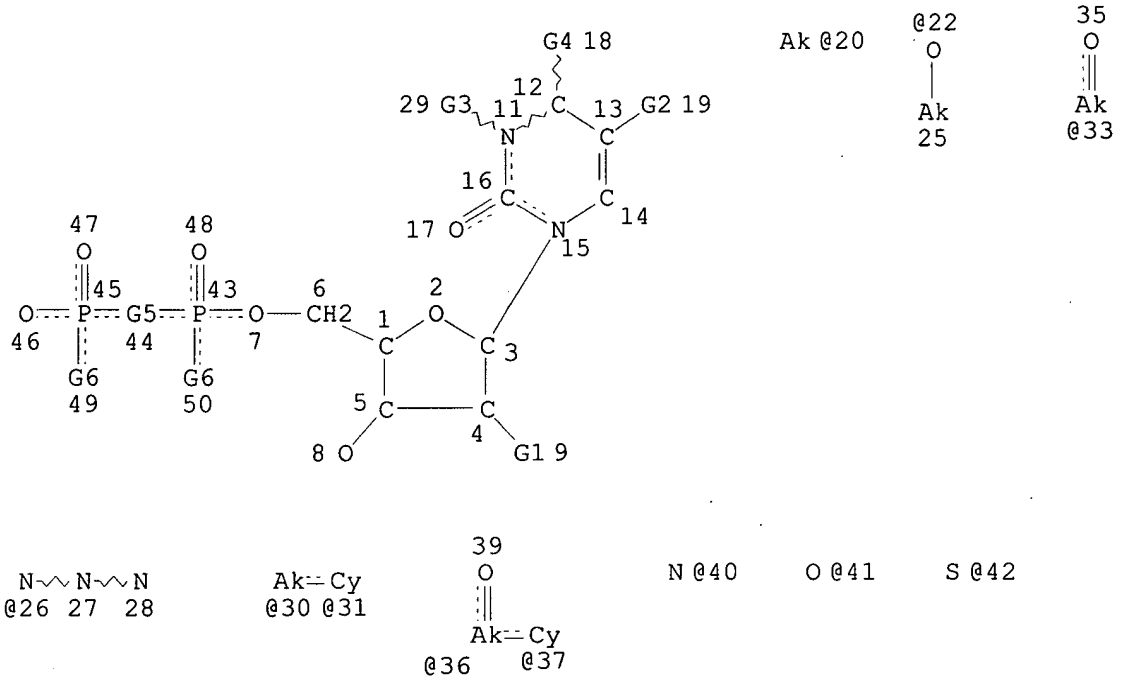


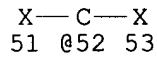





```
VAR G1=O/S
VAR G2=O/CH2/NH/11
VAR G3=O/H
REP G4=(0-1) 32-24 33-22
NODE ATTRIBUTES:
CONNECT IS M1  RC AT  20
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  26

STEREO ATTRIBUTES: NONE
L15        4525 SEA FILE=REGISTRY SUB=L12 CSS FUL L13
L18             STR
```

Jan Delaval
Reference Librarian
Biotechnology & Chemical Library
CM1 1E07 – 703-308-4498
jan.delaval@uspto.gov



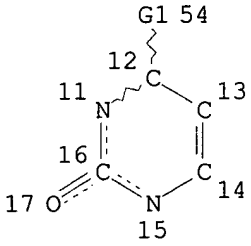


VAR G1=H/O
VAR G2=H/X/AK/20/22/NO2/26
VAR G3=H/AK/30/31/33/36/37
VAR G4=41/42/40
VAR G5=O/N/CH2/52
VAR G6=O/S
NODE ATTRIBUTES:
CONNECT IS M1 RC AT 20
CONNECT IS M1 RC AT 40
CONNECT IS M1 RC AT 41
CONNECT IS M1 RC AT 42
CONNECT IS M1 RC AT 43
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 46

STEREO ATTRIBUTES: NONE
L20 246 SEA FILE=REGISTRY SUB=L15 CSS FUL L18
L24 STR

Ak @20 Ak—Cy @30 31 O—G2 @55 56



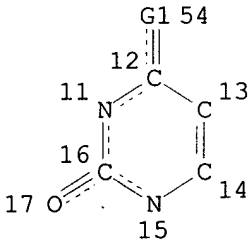
S—G2 @57 58 Cy @59

N—G2 @60 61 G2—N—G2 62 @63 64

VAR G1=O/S/N/55/57/60/63
VAR G2=AK/20/CY/59/30
NODE ATTRIBUTES:
CONNECT IS M1 RC AT 11
CONNECT IS M1 RC AT 13
CONNECT IS M1 RC AT 15
CONNECT IS M1 RC AT 20
CONNECT IS M1 RC AT 59
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 21

STEREO ATTRIBUTES: NONE
L26 240 SEA FILE=REGISTRY SUB=L20 CSS FUL L24
L27 STR

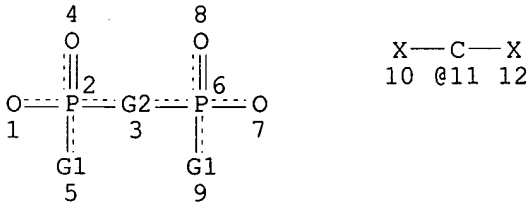


VAR G1=O/S
NODE ATTRIBUTES:
CONNECT IS M1 RC AT 11
CONNECT IS M1 RC AT 13
CONNECT IS M1 RC AT 15
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

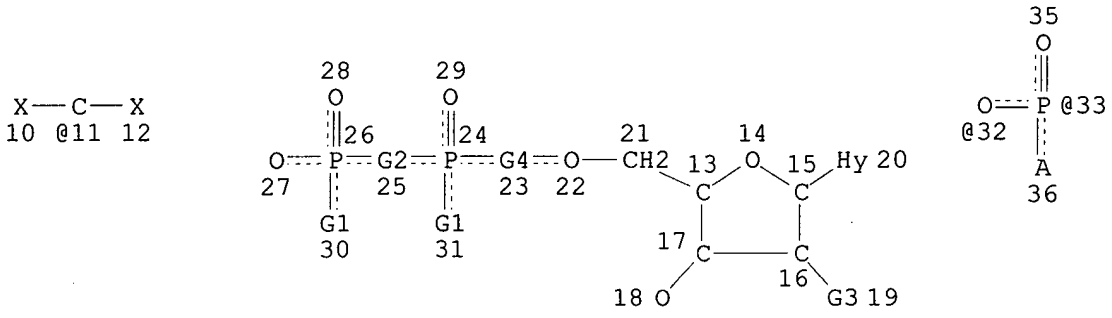
GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 8

STEREO ATTRIBUTES: NONE
L28 156 SEA FILE=REGISTRY SUB=L26 CSS FUL L27
L29 84 SEA FILE=REGISTRY ABB=ON PLU=ON L26 NOT L28
L30 224 SEA FILE=REGISTRY ABB=ON PLU=ON (L26 OR L28 OR L29) NOT (11C# OR 13C# OR 14C# OR C11# OR C13# OR C14# OR (D OR T)/ELS OR 32P)

```
L31          211 SEA FILE=REGISTRY ABB=ON  PLU=ON  L30 NOT IDS/CI
L32          192 SEA FILE=REGISTRY ABB=ON  PLU=ON  L31 NOT COMPD
L33          184 SEA FILE=REGISTRY ABB=ON  PLU=ON  L32 NOT PMS/CI
L34          182 SEA FILE=REGISTRY ABB=ON  PLU=ON  L33 NOT 33S
L35          180 SEA FILE=REGISTRY ABB=ON  PLU=ON  L34 NOT 36S
L36          178 SEA FILE=REGISTRY ABB=ON  PLU=ON  L35 NOT 32S
L37          166 SEA FILE=REGISTRY ABB=ON  PLU=ON  L36 NOT (LABELED OR 32P2 OR
                 18O# OR 34S)
L40          165 SEA FILE=REGISTRY ABB=ON  PLU=ON  L37 NOT FERROCENYL


=> d sta que l56
L10              STR
```

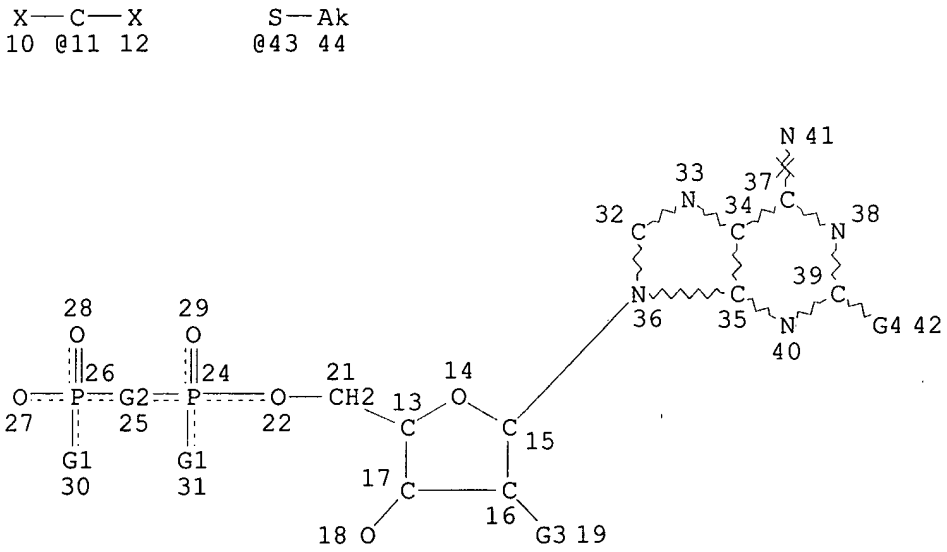



```
VAR G1=O/S
VAR G2=O/CH2/NH/11
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  12

STEREO ATTRIBUTES: NONE
L12       24293 SEA FILE=REGISTRY SSS FUL L10
L13             STR
```




```
VAR G1=O/S
VAR G2=O/CH2/NH/11
VAR G3=O/H
REP G4=(0-1) 32-24 33-22
NODE ATTRIBUTES:
CONNECT IS M1  RC AT  20
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  26

STEREO ATTRIBUTES: NONE
L15        4525 SEA FILE=REGISTRY SUB=L12 CSS FUL L13
```

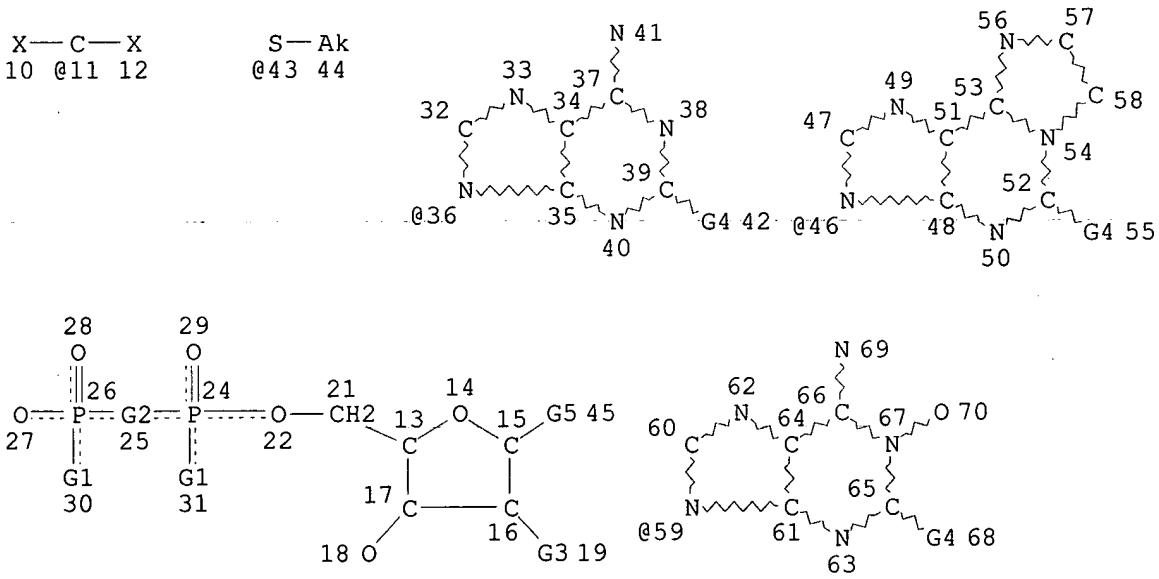
L38 STR



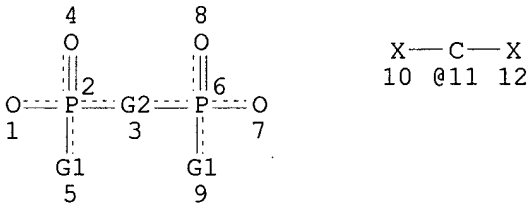
VAR G1=O/S
VAR G2=O/CH2/NH/11
VAR G3=O/H
VAR G4=H/X/43
NODE ATTRIBUTES:
NSPEC IS RC AT 41
CONNECT IS M1 RC AT 38
CONNECT IS M1 RC AT 41
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 33

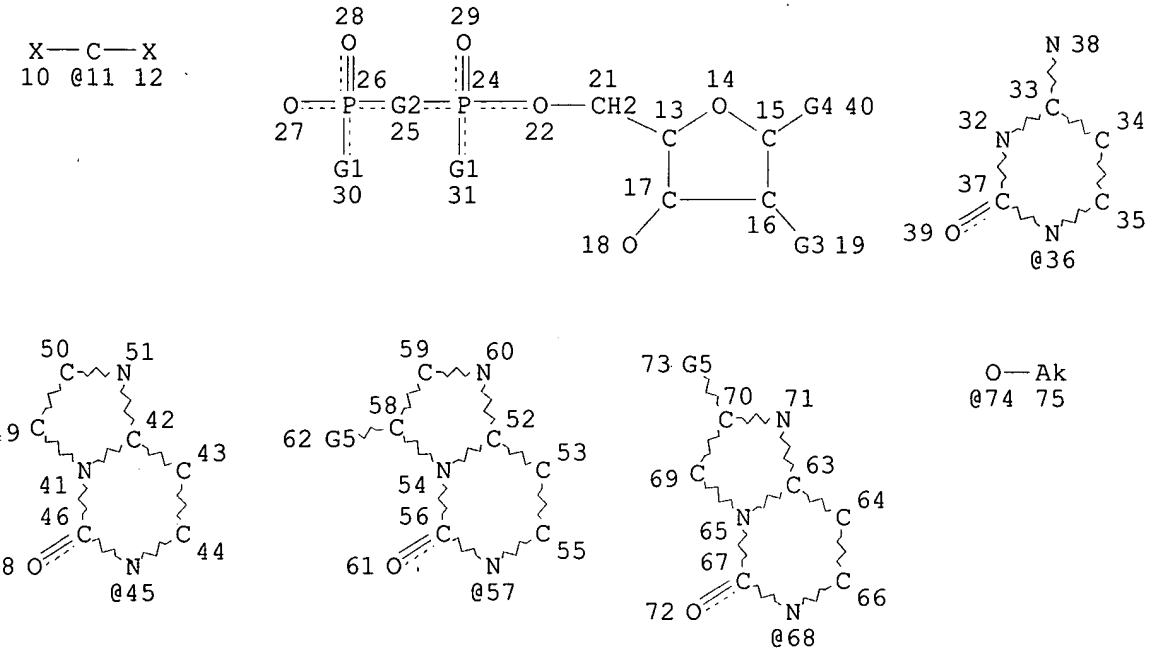
STEREO ATTRIBUTES: NONE
L41 SCR 2039 OR 2043 OR 2048
L43 334 SEA FILE=REGISTRY SUB=L15 CSS FUL L38 NOT L41
L44 STR



```
VAR G1=O/S
VAR G2=O/CH2/NH/11
VAR G3=O/H
VAR G4=H/X/43
VAR G5=36/46/59
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS  59

STEREO ATTRIBUTES: NONE
L46          266 SEA FILE=REGISTRY SUB=L43 CSS FUL L44
L47          190 SEA FILE=REGISTRY ABB=ON  PLU=ON  L46 NOT COMPD
L48            8 SEA FILE=REGISTRY ABB=ON  PLU=ON  L47 AND NC>=2 NOT SALT
L50          137 SEA FILE=REGISTRY ABB=ON  PLU=ON  L47 AND NC>=2 NOT L48
L51          132 SEA FILE=REGISTRY ABB=ON  PLU=ON  L50 NOT MXS/CI
L52           12 SEA FILE=REGISTRY ABB=ON  PLU=ON  L51 AND (C28H22N2 OR
                 C21H20N3 OR C15H16N3 OR C15H14N OR C15H11N2 OR C36H24N4 OR
                 C44H38N8 OR C122H200N12 OR C46H68N4 OR C38H30N4 OR C21H15N2)
L53            5 SEA FILE=REGISTRY ABB=ON  PLU=ON  L51 AND CU/ELS
L54            3 SEA FILE=REGISTRY ABB=ON  PLU=ON  L53 NOT KAPPA
L55            2 SEA FILE=REGISTRY ABB=ON  PLU=ON  L53 NOT L54
L56          118 SEA FILE=REGISTRY ABB=ON  PLU=ON  L51 NOT (L52 OR L55)


=>
=>

=> d sta que l92
L10               STR
```




```
VAR G1=O/S
VAR G2=O/CH2/NH/11
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  12

STEREO ATTRIBUTES: NONE
L12        24293 SEA FILE=REGISTRY SSS FUL L10
L41              SCR 2039 OR 2043 OR 2048
L88              STR
```



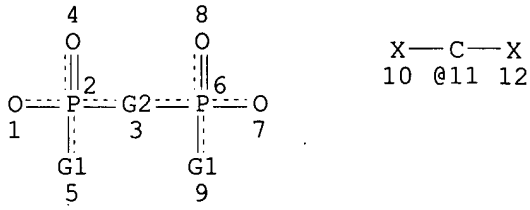
VAR G1=O/S
VAR G2=O/CH2/NH/11
VAR G3=O/H
VAR G4=36/45/57/68
VAR G5=AK/74/NO2/X/76/79
NODE ATTRIBUTES:
CONNECT IS M1 RC AT 79
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 67

STEREO ATTRIBUTES: NONE
L91 38 SEA FILE=REGISTRY SUB=L12 CSS FUL L88 NOT L41
L92 34 SEA FILE=REGISTRY ABB=ON PLU=ON L91 NOT COMPD

=>
=>

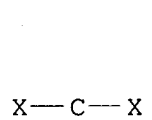
=> d sta que l76
L10 STR

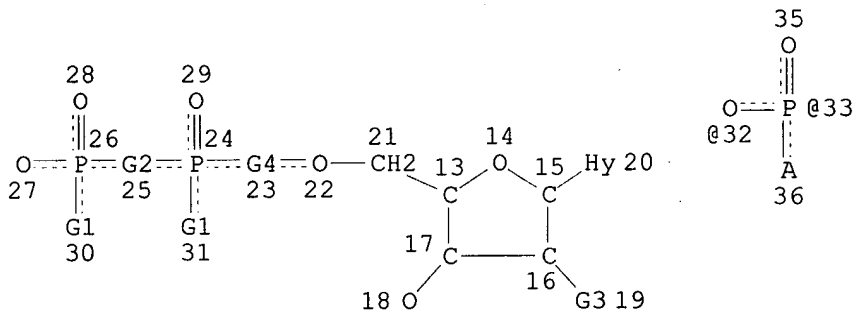


VAR G1=O/S
VAR G2=O/CH2/NH/11
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE
L12 24293 SEA FILE=REGISTRY SSS FUL L10
L13 STR



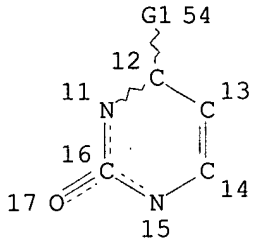


VAR G1=O/S
VAR G2=O/CH2/NH/11
VAR G3=O/H
REP G4=(0-1) 32-24 33-22
NODE ATTRIBUTES:
CONNECT IS M1 RC AT 20
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 26

STEREO ATTRIBUTES: NONE
L15 4525 SEA FILE=REGISTRY SUB=L12 CSS FUL L13
L24 STR

Ak @20 Ak=Cy @30 31 O—G2 @55 56



S—G2 @57 58 Cy @59

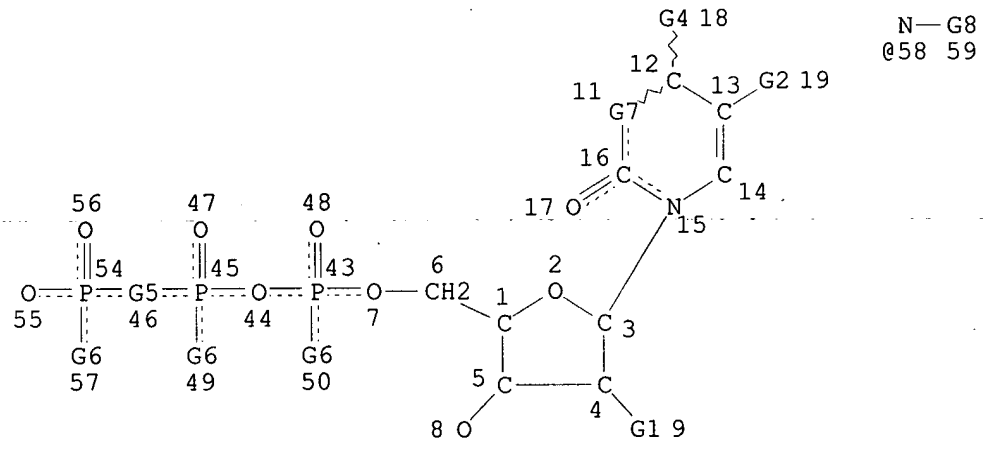
N=G2 @60 61 G2=N=G2 62 @63 64

VAR G1=O/S/N/55/57/60/63
VAR G2=AK/20/CY/59/30
NODE ATTRIBUTES:
CONNECT IS M1 RC AT 11
CONNECT IS M1 RC AT 13
CONNECT IS M1 RC AT 15
CONNECT IS M1 RC AT 20
CONNECT IS M1 RC AT 59
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 21

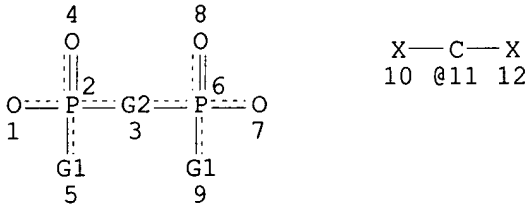
STEREO ATTRIBUTES: NONE
L41 SCR 2039 OR 2043 OR 2048
L64 STR

Ak @20 Ak=Cy @30 @31 35 O Ak @33 N @40 O @41 S @42 X—C—X 51 @52 53

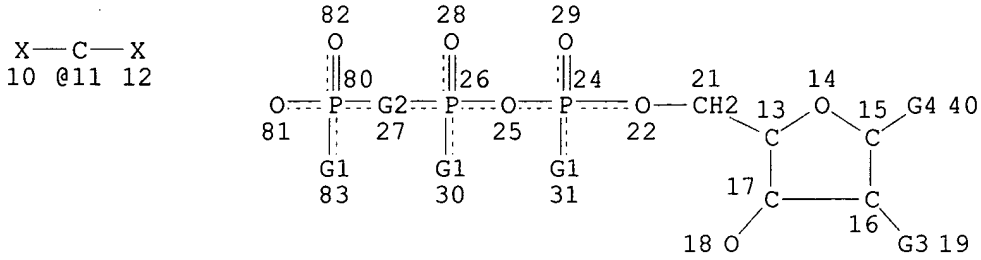


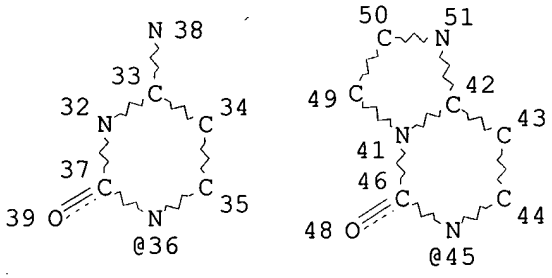
VAR G1=H/O
VAR G2=H/X
VAR G4=41/42/40
VAR G5=O/N/CH2/52

```
VAR G6=O/S
VAR G7=N/58
VAR G8=AK/33/20/30/31
NODE ATTRIBUTES:
CONNECT IS M1  RC AT  20
CONNECT IS M1  RC AT  40
CONNECT IS M1  RC AT  41
CONNECT IS M1  RC AT  42
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  43

STEREO ATTRIBUTES: NONE
L66          271 SEA FILE=REGISTRY SUB=L15 CSS FUL L64 NOT L41
L68          257 SEA FILE=REGISTRY SUB=L66 CSS FUL L24
L69           14 SEA FILE=REGISTRY ABB=ON  PLU=ON  L66 NOT L68
L70            2 SEA FILE=REGISTRY ABB=ON  PLU=ON  L69 AND (C10H18N3O14P3 OR
                 C10H18N3O15P3)
L71          255 SEA FILE=REGISTRY ABB=ON  PLU=ON  L68 NOT (MXS OR IDS)/CI
L72          230 SEA FILE=REGISTRY ABB=ON  PLU=ON  L71 NOT COMPD
L73           81 SEA FILE=REGISTRY ABB=ON  PLU=ON  L72 AND NC>=2
L74           77 SEA FILE=REGISTRY ABB=ON  PLU=ON  L73 NOT CCS/CI
L75          149 SEA FILE=REGISTRY ABB=ON  PLU=ON  L72 NOT L73
L76          228 SEA FILE=REGISTRY ABB=ON  PLU=ON  (L70 OR L74 OR L75)


=>
=>

=> d sta que l87
L10               STR
```




```
VAR G1=O/S
VAR G2=O/CH2/NH/11
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  12

STEREO ATTRIBUTES: NONE
L12        24293 SEA FILE=REGISTRY SSS FUL L10
L41              SCR 2039 OR 2043 OR 2048
L80              STR
```

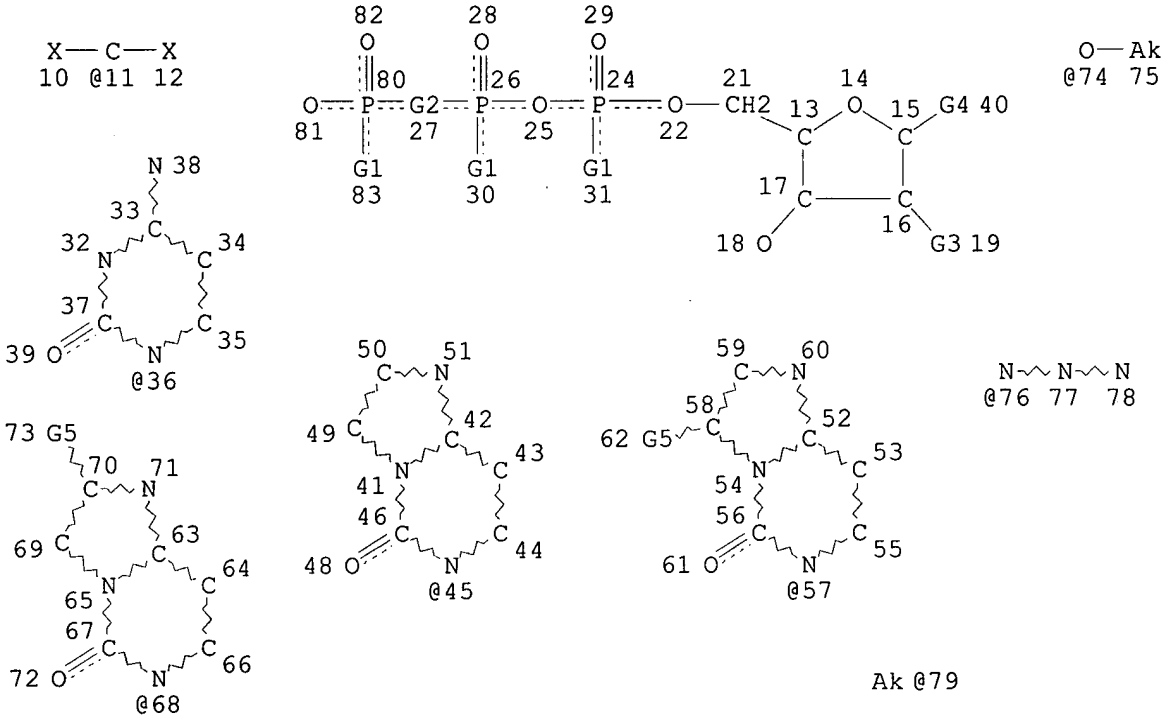




VAR G1=O/S
VAR G2=O/CH2/NH/11
VAR G3=O/H
VAR G4=36/45
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 43

STEREO ATTRIBUTES: NONE
L82 488 SEA FILE=REGISTRY SUB=L12 SSS FUL L80
L83 STR



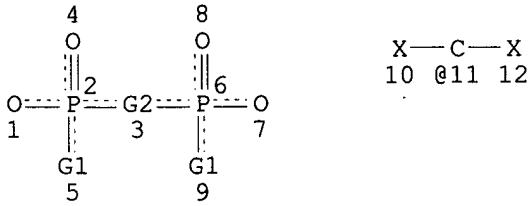
VAR G1=O/S
VAR G2=O/CH2/NH/11
VAR G3=O/H
VAR G4=36/45/57/68
VAR G5=AK/74/NO2/S/76/79
NODE ATTRIBUTES:
CONNECT IS M1 RC AT 79
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 71

STEREO ATTRIBUTES: NONE
L86 61 SEA FILE=REGISTRY SUB=L82 CSS FUL L83 NOT L41
L87 50 SEA FILE=REGISTRY ABB=ON PLU=ON L86 NOT COMPD

=>
=>

=> d sta que l100
L10 STR

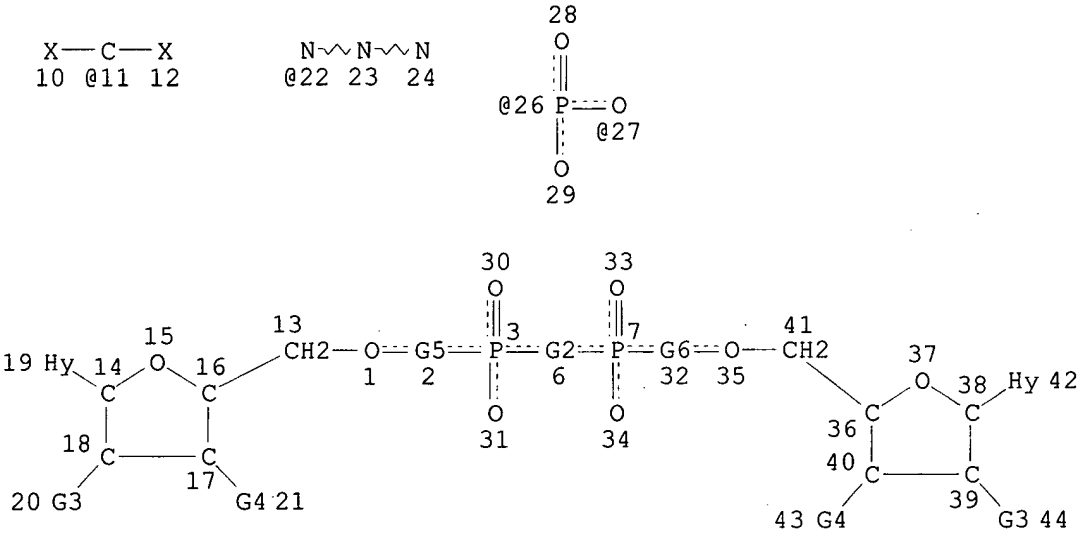


VAR G1=O/S
VAR G2=O/CH2/NH/11

NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 12

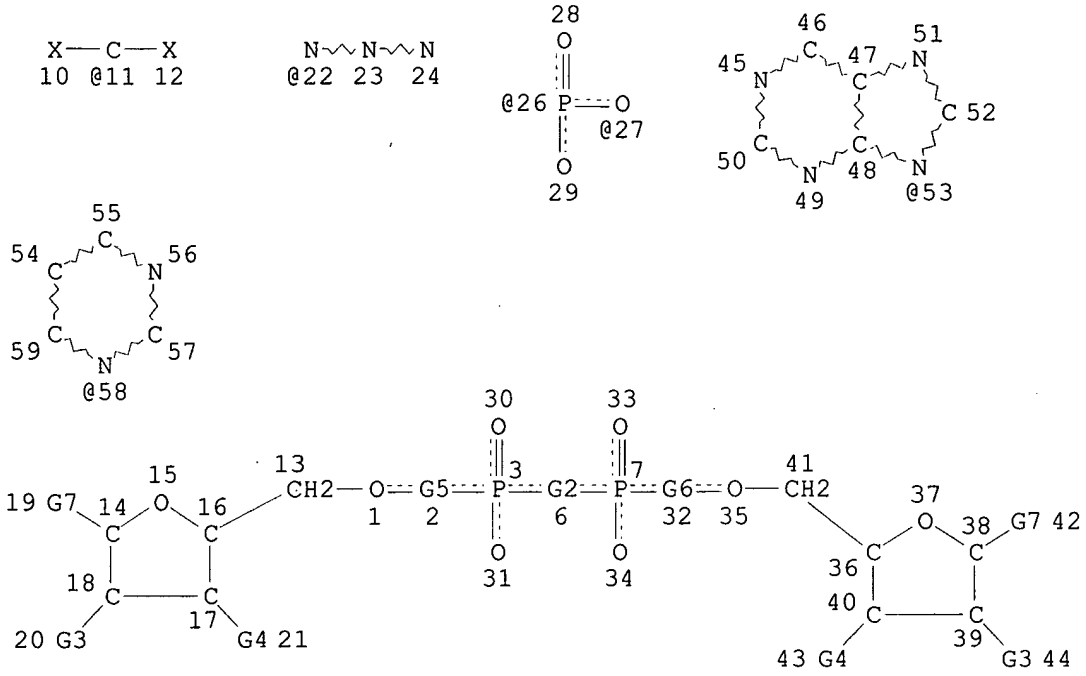
STEREO ATTRIBUTES: NONE
L12 24293 SEA FILE=REGISTRY SSS FUL L10
L41 SCR 2039 OR 2043 OR 2048
L93 STR



VAR G2=O/CH2/11/NH
VAR G3=H/O
VAR G4=O/22
REP G5=(0-2) 26-1 27-3
REP G6=(0-2) 27-7 26-35
NODE ATTRIBUTES:
CONNECT IS M1 RC AT 19
CONNECT IS M1 RC AT 42
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 39

STEREO ATTRIBUTES: NONE
L96 1242 SEA FILE=REGISTRY SUB=L12 CSS FUL L93 NOT L41
L97 STR



VAR G2=O/CH2/11/NH
VAR G3=H/O
VAR G4=O/22
REP G5=(0-2) 26-1 27-3
REP G6=(0-2) 27-7 26-35
VAR G7=53/58
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC 51 54
NUMBER OF NODES IS 54

STEREO ATTRIBUTES: NONE
L98 333 SEA FILE=REGISTRY SUB=L96 SSS FUL L97
L99 333 SEA FILE=REGISTRY ABB=ON PLU=ON L98 NOT (MXS OR IDS OR CCS)/CI
L100 324 SEA FILE=REGISTRY ABB=ON PLU=ON L99 NOT COMPD

=> d his

(FILE 'HOME' ENTERED AT 09:48:11 ON 16 JUL 2002)
SET COST OFF

FILE 'HCAPLUS' ENTERED AT 09:48:51 ON 16 JUL 2002
E PETERSON W/AU
L1 26 S E3,E14,E33,E34
L2 5 S L1 AND (1 OR 63)/SC,SX NOT MORPHINE
L3 4 S L1 AND (2 OR 12 OR 13)/SC,SX
SEL RN L2

FILE 'REGISTRY' ENTERED AT 09:53:25 ON 16 JUL 2002
L4 129 S E1-E129
L5 53 S L4 AND P/ELS

```
L6           50 S L5 AND P>=2

     FILE 'HCAPLUS' ENTERED AT 09:56:35 ON 16 JUL 2002
                SEL RN L3

     FILE 'REGISTRY' ENTERED AT 09:56:45 ON 16 JUL 2002
L7           12 S E130-E141
L8            3 S L7 AND P/ELS
L9            2 S L8 AND P>=2
L10             STR
L11          50 S L10
L12       24293 S L10 FUL
                SAV TEMP L12 OWENS570/A
L13             STR L10
L14          50 S L13 CSS SAM SUB=L12
L15        4525 S L13 CSS FUL SUB=L12
                SAV TEMP L15 OWENS570A/A
L16             STR
L17          50 S L16 CSS SAM SUB=L15
L18             STR L16
L19          11 S L18 CSS SAM SUB=L15
L20         246 S L18 CSS FUL SUB=L15
                SAV L20 TEMP OWENS570AA/A
L21             STR L18
L22           0 S L21 CSS SAM SUB=L20
L23           0 S L21 CSS FUL SUB=L20
L24             STR L21
L25          11 S L24 CSS SAM SUB=L20
L26         240 S L24 CSS FUL SUB=L20
                SAV L26 TEMP OWENS570AAA/A
L27             STR L24
L28         156 S L27 CSS FUL SUB=L26
                SAV L28 OWENS570AAAA/A TEMP
L29          84 S L26 NOT L28
L30         224 S L26,L28,L29 NOT (11C# OR 13C# OR 14C# OR C11# OR C13# OR C14#
L31         211 S L30 NOT IDS/CI
L32         192 S L31 NOT COMPD
L33         184 S L32 NOT PMS/CI
L34         182 S L33 NOT 33S
L35         180 S L34 NOT 36S
L36         178 S L35 NOT 32S
L37         166 S L36 NOT (LABELED OR 32P2 OR 18O# OR 34S)
                SAV L37 OWEN570AAAAA/A TEMP
L38             STR L13
L39          22 S L38 CSS SAM SUB=L15
L40         165 S L37 NOT FERROCENYL
L41             SCR 2039 OR 2043 OR 2048
L42          18 S L38 NOT L41 CSS SAM SUB=L15
L43         334 S L38 NOT L41 CSS FUL SUB=L15
                SAV TEMP L43 OWENS570B/A
L44             STR L38
L45          17 S L44 CSS SAM SUB=L43
L46         266 S L44 CSS FUL SUB=L43
                SAV L46 OWENS570BB/A
                DEL  OWENS570BB/A
                SAV L46 OWENS570BB/A TEMP
L47         190 S L46 NOT COMPD
L48           8 S L47 AND NC>=2 NOT SALT
L49           3 S L48 AND (H2O OR C4H12N)
L50         137 S L47 AND NC>=2 NOT L48
L51         132 S L50 NOT MXS/CI
L52          12 S L51 AND (C28H22N2 OR C21H20N3 OR C15H16N3 OR C15H14N OR C15H1
L53           5 S L51 AND CU/ELS
```

```
L54           3 S L53 NOT KAPPA
L55           2 S L53 NOT L54
L56         118 S L51 NOT L52,L55
                SAV L56 TEMP OWENS570BBB/A
L57             STR L13
L58           0 S L57 NOT L41 CSS SAM SUB=L15
L59           0 S L57 NOT L41 SAM SUB=L15
L60           0 S L57 CSS SAM SUB=L12
L61           0 S L57 SAM SUB=L12
L62          23 S L57 FUL SUB=L12
                SAV L62 TEMP OWENS570C/A
L63           0 S L57 CSS FUL SUB=L62
                SAV L63 TEMP OWENS570CC/A
L64             STR L18
L65          16 S L64 NOT L41 CSS SAM SUB=L15
L66         271 S L64 NOT L41 CSS FUL SUB=L15
                SAV TEMP L66 OWENS570D/A
L67          16 S L24 CSS SAM SUB=L66
L68         257 S L24 CSS FUL SUB=L66
                SAV TEMP L68 OWENS570DD/A
L69          14 S L66 NOT L68
L70           2 S L69 AND (C10H18N3O14P3 OR C10H18N3O15P3)
L71         255 S L68 NOT (MXS OR IDS)/CI
L72         230 S L71 NOT COMPD
L73          81 S L72 AND NC>=2
L74          77 S L73 NOT CCS/CI
L75         149 S L72 NOT L73
L76         228 S L70,L74,L75
                SAV TEMP L76 OWENS570DDD/A
L77             STR L57
L78           0 S L77 CSS SAM SUB=L12
L79           0 S L77 SAM SUB=L12
L80             STR L77
L81          25 S L80 SAM SUB=L12
L82         488 S L80 FUL SUB=L12
                SAV L82 OWENS570E/A TEMP
L83             STR L77
L84           4 S L83 CSS SAM SUB=L82
L85           2 S L83 NOT L41 CSS SAM SUB=L82
L86          61 S L83 NOT L41 CSS FUL SUB=L82
                SAV TEMP L86 OWENS570EE/A
L87          50 S L86 NOT COMPD
                SAV TEMP L87 OWENS570EEE/A
L88             STR L57
L89           2 S L88 CSS SAM SUB=L12
L90           2 S L88 NOT L41 CSS SAM SUB=L12
L91          38 S L88 NOT L41 CSS FUL SUB=L12
                SAV TEMP L91 OWENSCCC/A
L92          34 S L91 NOT COMPD
L93             STR L10
L94          50 S L93 CSS SAM SUB=L12
L95          50 S L93 NOT L41 CSS SAM SUB=L12
L96        1242 S L93 NOT L41 CSS FUL SUB=L12
                SAV TEMP L96 OWENS570F/A
L97             STR L93
L98         333 S L97 FUL SUB=L96
                SAV TEMP L98 OWENS570FF/A
L99         333 S L98 NOT (MXS OR IDS OR CCS)/CI
L100        324 S L99 NOT COMPD
L101         84 S L100 AND NC>=2
L102        240 S L100 NOT L101
                SAV TEMP L100 OWENS570FFF/A
```

```
     FILE 'HCAPLUS' ENTERED AT 12:21:12 ON 16 JUL 2002
L103        9464 S L40 OR L56 OR L92 OR L76 OR L87 OR L100
L104           5 S L1 AND L103
L105       69691 S L6 OR L9
L106           5 S L1 AND L105
L107           5 S L104,L106
                 E RETINA/CT
                 E E3+ALL
L108       13385 S E2
                 E RETINA/CT
                 E E24+ALL
L109        2229 S E2
                 E RETINA/CT
                 E E35+ALL
L110         583 S E2
                 E RETINA/CT
                 E E17+ALL
                 E RETINA/CT
                 E E20+ALL
L111         303 S E2
                 E MACULAR DEGENERAITON/CT
                 E E4+ALL
L112         581 S E2
                 E STAGARDT/CT
                 E STARGARDT/CT
                 E STARGARDT
L113          97 S E2-E6
                 E BEST/CT
                 E GLAUCOMA/CT
                 E E4+ALL
L114        2669 S E5,E4+NT
                 E RETINITS/CT
                 E RETINITIS/CT
                 E E4+ALL
L115         596 S E2
L116           1 S E1
                 E OPTIC NERVE/CT
                 E E3+ALL
L117        1806 S E2
                 E EYE/CT
                 E E3+ALL
L118       56834 S E8,E7+NT
                 E E35+ALL
L119       21818 S E3+NT
L120          82 S L103 AND L108-L119
L121         690 S L105 AND L108-L119
L122          46 S L103 AND (RETINA OR RETINAL OR RETINOPATH? OR MACULAR(L)DEGEN
L123         321 S L105 AND (RETINA OR RETINAL OR RETINOPATH? OR MACULAR(L)DEGEN
L124           9 S L103 AND (CYSTOID(L)MACULA?(L)EDEM? OR RETINA?(L)DETACH? OR P
L125          36 S L105 AND (CYSTOID(L)MACULA?(L)EDEM? OR RETINA?(L)DETACH? OR P
L126         739 S L120-L125
L127          12 S L103(L)THU/RL AND L126
L128          26 S L105(L)THU/RL AND L126
L129          28 S L127,L128
L130          31 S L107,L129
L131           5 S L1 AND L130
                 SEL HIT RN

     FILE 'REGISTRY' ENTERED AT 12:38:58 ON 16 JUL 2002
L132          50 S E1-E50
L133          41 S L132 NOT S/ELS
L134          38 S L133 NOT THYMIDINE
L135          13 S L134 AND (C18H27N4O26P5 OR C18H25N4O20P3 OR C18H26N4O22P4 OR
```

```
L137          1 S L134 AND C18H26N4O23P4
L138         11 S L135 NOT (211448-76-9 OR 211427-10-0)
L139         12 S L137,L138

     FILE 'REGISTRY' ENTERED AT 13:09:25 ON 16 JUL 2002

     FILE 'HCAPLUS' ENTERED AT 13:09:44 ON 16 JUL 2002
               SEL HIT RN L130

     FILE 'REGISTRY' ENTERED AT 13:10:04 ON 16 JUL 2002
L140         93 S E51-E143
L141         81 S L140 NOT L139
L142         43 S L141 NOT L132

     FILE 'HCAPLUS' ENTERED AT 13:11:29 ON 16 JUL 2002

     FILE 'REGISTRY' ENTERED AT 13:12:00 ON 16 JUL 2002
```